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ABSTRACT

This practicum attempted to create a comprehensive developmental curriculum to be used in a non-categorical program serving developmentally delayed preschool-aged children. A second goal was to develop a parent education component that would provide parents with information and tools necessary to be active and competent partners in their child's education. In response to staff needs, a developmental guide was created to be used in selecting curricular objectives while still allowing for flexibility in choice of activities based on the needs of the individual children. An evaluation component was also built into the program. Results indicated that the guide was too long and unwieldy for daily use in selecting educational objectives, but was very useful in diagnosing student strengths and weaknesses, measuring progress throughout the school year, and identifying areas needing more emphasis in everyday classroom activities. Follow-up surveys found a high degree of satisfaction with parent-teacher communication among parents. Evaluation of overall effectiveness suggests that this service delivery model is most beneficial for students whose primary handicapping condition is speech/language, that staff competence using incidental teaching techniques is an important determinant of program effectiveness, and that time management and classroom structure contribute greatly to the success of any early intervention program. Almost half the document consists of the following appendixes: "Philosophy of Education," "Original Developmental Guide Organized by Skill Areas," "Initial Parent Survey and Inservice Survey," "Incidental Teaching Techniques," "Revised Developmental Guide Organized by Chronological Age," "Student Data Sheets," "Monthly Newsletters," "Parent Inservices--Content and Flyers," "Parent Inservice Survey Results," and "Summary." Approximately 70 references are provided. (Author/PB)

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Developing a Core Curriculum and
Parent Education Component
in a
Preschool Special Education Program

by

Robyn Goddard Runbeck

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Developing a Core Curriculum and Parent Education Component in a Preschool Special Education Program

by

Robyn Goddard Runbeck

Cluster XXIII

A Practicum II Report Presented to the Ed.D. Program
in Early and Middle Childhood
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

NOVA UNIVERSITY

1989

PRACTICUM APPROVAL SHEET

This practicum took place as described.

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Approved:

5/31/89

Date of Final Approval of Report

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ABSTRACT

Developing a Core Curriculum and Parent Education Component in a Special Education Preschool Program. Runbeck, Robyn G., 1989: Practicum Report, Nova University, Ed.D. Program in Early and Middle Childhood. Descriptors: Comprehensive Curriculum/Curriculum Guide/Parent Workshops/Parent-Teacher Cooperation/Early Intervention/Pre-Kindergarten

This practicum was designed to facilitate the creation of a comprehensive developmental curriculum to be used in a non-categorical program serving developmentally delayed preschool-aged children. A second goal was to develop a parent education component that would provide parents with the information and tools necessary to be more active and competent partners in their child's educational program.

The writer interviewed the program director and staff to determine curricular needs and priorities, and found that the staff needed a guide that would dictate content and sequence, but still be flexible enough to allow them to develop their own activities based on the individual needs of the children. A subsequent parent survey indicated that communication development, parenting skills and behavior control were the most common areas of concern. To address these problems, a committee chosen by the program director created a developmental guide to be used in selecting curricular objectives, as well as a parent education component comprised of parent workshops and increased parent/teacher communication. The writer monitored the implementation of the guide and developed and conducted an evaluation component to measure the effectiveness of the guide and parent component in meeting the needs of the program's staff, students and families.

The results of the practicum indicated that the guide was too long and unwieldy for daily use in selecting educational objectives, but was very useful in diagnosing student strengths and weaknesses, in measuring progress over the course of the school year, and in identifying those areas needing more emphasis in the everyday activities of the classroom. Follow-up parent surveys and interviews revealed general satisfaction with the amount and quality of parent-teacher communication, and with the helpfulness of the parent workshops in addressing common parental concerns. The writer's evaluation of overall program effectiveness suggested that this service delivery model is most beneficial for students whose primary handicapping condition is speech/language, that staff competence using incidental teaching techniques is an important determinant of program effectiveness, and that time management and classroom structure contribute greatly to the success of any early intervention program.

CHAPTER I

INTRODUCTION

Description of the Community

The facility in which the practicum was conducted is a public school attended by approximately 500 students, located in a suburb of one of the largest and most rapidly growing cities in the southwest. The socio-economic make-up of the area is varied; however, the neighborhood served by this school is primarily lower-middle class. The cost of living is somewhat lower in this community than on the nation's east or west coasts, but higher than the cost of living in the midwest. The state is politically conservative, and has tended to uphold the rights of individuals over the collective welfare of the group as evidenced by repeated failures to enact mandatory seatbelt or motorcycle helmet laws, and its refusal to permit union membership to be a pre-requisite for employment. Major valley employers include high-tech industry, real estate development and construction, tourism and state government.

The Writer's Work Setting and Role

The classroom in which the practicum was conducted is housed in one of fourteen elementary schools in a

unified district serving approximately 18,000 students; however, this particular special education program serves students from all over the district as well as a few students from other districts where similar services are not available. The PANDA program (Preschool for Assessed Needs in Developmental Areas) provides developmentally based intervention services emphasizing cognitive, communication, self-help, motor and social/emotional development. The preschool employs a cross-categorical model to serve children between the ages of three and five who have been identified as educable mentally handicapped; trainable mentally handicapped; physically handicapped; speech handicapped; visually handicapped; hearing handicapped or multiply handicapped. Now in its third year of operation, the PANDA program is a grant-funded project designed to facilitate the growth and development of these youngsters through the use of special instructional techniques utilizing the expertise of professionals in special education, physical therapy, speech/language therapy, audiology and sensory functioning.

The preschool early intervention program serves approximately 20 handicapped students divided into two classes of 9 to 10 students each. Morning and afternoon sessions of two and one-half hours are held 4 days each

week. The fifth day is devoted to parent conferences, multi-disciplinary team conferences, home visits and staff planning.

The PANDA program is staffed with a full-time special education teacher, a full-time teacher's aide and a half-time speech pathologist. Non-skilled parent volunteers are also recruited to assist in running the program, and OT/PT, vision and hearing resource specialists are available on a consultant basis. There is approximately one adult for every four students, and together they provide class sessions that include individual therapy as well as small group instruction directed toward the individual goals of each student's Individualized Education Plan (IEP).

The PANDA program is directed by an early childhood specialist whose salary is paid by the district. She is responsible for hiring and evaluating staff, determining policy, student recruitment, public relations, grant submission and compliance with state and federal regulations. She makes on-site visits twice each month to measure progress toward objectives and to monitor compliance with state/federal statutes. She is also available for telephone consultations at any time, but otherwise leaves the day-to-day operation of the program in the hands of the classroom teacher.

The writer has worked as a speech pathologist in this district for 6 years. She holds an undergraduate degree in communicative disorders and a master's degree in speech and hearing sciences. She is certified by the State Department of Education to provide speech/language services to kindergarten through 12th grade students, and has earned her Certificate of Clinical Competence from the American Speech and Hearing Association.

CHAPTER II

STUDY OF THE PROBLEM

Problem Identification

At the beginning of the 1987-1988 school year, the writer approached the speech/language department chairperson to solicit advice on possible problem areas that might be suitable for a doctoral practicum. The department chairperson advised the writer to investigate the preschool program as it was relatively new and not yet fully developed. This suggestion was welcomed by the writer whose future career goals focus on the preschool-aged child.

Subsequent interviews with the classroom teacher, program director and classroom speech pathologist revealed a general dissatisfaction with the lack of a philosophy and core curriculum that could guide the staff in their work with these children. It became apparent that in their attempts to provide services for these children as quickly as possible, the program personnel had not had the time or resources necessary to develop a rationale for early intervention, a philosophy of education or a comprehensive core curriculum that could direct and coordinate their efforts.

As a result, the classroom teacher and speech pathologist were selecting their instructional content based on the Individual Education Plans of each student, a laborious and time-consuming process. This situation made the PANDA program very dependent upon its personnel as the primary means of achieving its objectives. It was felt that the creation of a philosophy and curriculum guide would enable the program to more easily accommodate changes in personnel without sacrificing the quality of service provided to its students, and would facilitate evaluation of the program's effectiveness by creating standards against which student progress could be measured.

In addition to the aforementioned hardships experienced by the classroom teacher and speech pathologist, the lack of a core curriculum that could be coordinated with other special education programs in the district impeded the program director's goal that the PANDA program become an integral part of the special education services provided by this district. Because it was a new program operating on grant funds instead of district monies, the PANDA program was viewed primarily as an auxiliary service offered by the district (one that could be eliminated at any time). Development of a coordinated curriculum that would present the necessary

content and competencies in a manner that would ensure maximum academic gains for self-contained special education students from preschool through grade twelve was a long-term district goal. A coordinated, comprehensive PANDA curriculum based on a sound educational philosophy was to be a first step toward this long-term objective.

Briefly stated then, the problem was that the PANDA program did not have a philosophy/rationale and core curriculum that could direct the efforts of its personnel in working with the handicapped children served by the program. The lack of a philosophy/rationale and curriculum resulted in a hit-and-miss approach to content and goal selection, resulting in inconsistencies in program content and student achievement from year to year, placing undue pressure on the program's staff, and occasionally inhibiting the integration of the program's students into other special education programs offered by the district.

Evidence of the Problem

The existence of the problem was documented through interviews with the program director, the classroom teacher and the classroom speech pathologist. Each interviewee was asked to talk about the PANDA program, their perception of its strengths and weaknesses and

their opinions with respect to possible solutions or changes in the existing format of the program. The initial interview was conducted with the Program Director in February of 1988. She described the district's commitment to early intervention and its long-term goal of developing a comprehensive, coordinated curriculum to serve self-contained special education students in grades kindergarten through twelve. She suggested that the creation of a comprehensive core curriculum for the preschool could serve as the foundation for the self-contained special education curriculum as well as strengthening the PANDA program itself. She also felt that the development of a core curriculum would more firmly integrate the PANDA program into the family of special education services provided by the district, thus ensuring its longevity.

Interviews with the classroom teacher and speech pathologist were conducted in March of 1988. Both teachers expressed firm commitment to the cross-categorical approach whereby children with a variety of handicapping conditions are served in the same setting. They felt that such an approach benefitted both lower and higher functioning students, albeit in different ways. Handicapped students with severe cognitive deficits made significant gains in social/interpersonal

development through their interactions with more mildly handicapped peers, while those students serving as peer models or tutors exhibited greater self-concept and better retention of acquired skills as a result of their "tutelage" of more severely handicapped students. They also felt that the close proximity of the Chapter I preschool and regular kindergartens was a distinct advantage, as it gave PANDA students the opportunity to interact on a regular basis with non-handicapped peers.

The classroom teacher stated that she had received several phone calls from preschool teachers in other districts requesting information about the PANDA program and curriculum, which led her to believe that the problem of developmentally appropriate curricula for cross-categorical preschool programs was not unique to this district. She suggested that the PANDA program was unique by virtue of the variety and severity of the handicaps exhibited by its students, and cited examples of neighboring preschool programs, which were, in some cases, sending their more severely handicapped students to the PANDA program because they were unable or unwilling to accommodate non-ambulatory students. The speech pathologist pointed out the impossibility of making substantial gains with these students in the limited amount of class time available, and expressed the need

for a home/parent component to assist students in generalizing the skills acquired in class into other environments. The classroom teacher concurred, adding that many of the families needed help with parenting, play and behavior management skills in order to deal more effectively with their child's handicap.

Both the classroom teacher and speech pathologist felt that the availability of a comprehensive curriculum guide would be of great assistance in planning each day's activities; however, they also expressed a desire that the curriculum be limited to content and sequence, thus enabling them to continue to choose the actual activities and units that the students would be studying. They felt that a curriculum that was too specific would hinder their ability to address the wide variety of needs exhibited by students in their program. In summary, both the classroom teacher and the speech pathologist expressed a need for a curriculum that would tell them what to teach and in what order, but that would remain flexible enough to meet the individual needs of each student. They also requested help in developing a family component that would assist them in meeting the broad spectrum of needs exhibited by their students' families.

In addition to the interviews of the personnel most closely involved in the PANDA program, a telephone

survey of neighboring districts was conducted to determine how the problems of this population were being addressed, and to see what curriculum, if any, was being used in the existing programs. Two of the 10 districts contacted provided screening services with follow-up referrals to appropriate social service agencies, but had no existing program for handicapped preschool students. Another district also had no existing program, but tuitioned its preschoolers out to neighboring districts offering preschool services.

Two of the other districts surveyed had contracted with the state university to serve their handicapped preschool students in the university's laboratory preschool. The remaining districts contacted offered early intervention classroom services to their handicapped preschool children; however, only one district had developed its own curriculum to meet the needs of its students and fulfill the goals of its program. The other district programs contacted were utilizing commercial curriculums or selecting instructional objectives from the Individual Education Plans of the students in the program. Each of these districts reported some degree of dissatisfaction with their chosen curriculum.

Possible Causes of the Problem

The PANDA program was initiated in response to numerous inquiries from parents of handicapped children seeking early intervention programs appropriate for the special needs of their children. In addition to local parent pressure, the enactment of Public Law 99-457 in 1986, section 619 of which extends the rights and protections of Public Law 94-142 (The Education of All Handicapped Children Act) to handicapped children between the ages of 3 and 5, was an additional motivating influence. P.L. 99-457 provides block grants to states over a 5-year period to enable them to plan and to develop comprehensive early intervention services for handicapped children and their families. At the end of the 5-year period, the program must be operational and must satisfy all of the criteria specified in the law. As a result of this push to provide services, inadequate time and resources were available to conduct the type of preliminary research and curriculum development that would ordinarily have been done prior to the implementation of a new program.

In addition to the time constraints imposed by the wording of P.L. 99-457, it should also be noted that early education for handicapped preschool students is a relatively recent phenomena. Prior to the passage of

P.L. 94-142 in 1975, few programs emphasizing intervention (as opposed to residential "warehousing") were available for young handicapped children. Consequently, there was a relative scarcity of research addressing the techniques and curricular content most effective with this population (particularly in comparison to the vast body of research addressing the education of non-handicapped children). Although researchers in the field of special education have devoted a much greater proportion of their research to issues concerning the education of young handicapped children in the years following the passage of P.L. 94-142, a considerable amount of research remains to be done with respect to the content, teaching techniques, learning modalities and compensatory strategies that will enable these students to fulfill their academic potential.

In this state particularly, education for the moderate and severely handicapped has tended to lag behind national trends, both for political and financial reasons. Educating students with special needs is an expensive proposition for a state that falls into the bottom 15% on per student spending for public education, and the limited number of students requiring such services constitutes a small and relatively ineffectual

political lobby. As a result, the education of students with moderate or severe handicaps was not a priority until the passage of federal legislation mandating appropriate educational services for this population. Even when faced with federal mandates, the state legislature has been very slow to acknowledge its responsibilities towards these students, and to appropriate the monies necessary to provide the essential educational programs for them.

One alternative considered by the committee was the possible adoption of an existing curriculum, either for permanent use or as a temporary "bridge" until a more appropriate one could be found or created; however, this option turned out to be more difficult and less satisfactory than anticipated. The curriculum committee conducted a selective review of the Brigance (1983), the Portage (Bluma et al., 1976), the Learning to Learn (Van de Riet & Resnick, 1973), the Bereiter-Engelmann (1966), the Ypsilanti Perry Preschool (Hohmann, 1979), and the Three, Four, Open the Door (New York Board of Education, 1986) programs.

All of these programs were judged inappropriate for one or more of the following reasons: (a) they were directed toward a specific handicapping condition; (b) they emphasized one area (i.e., motor or cognitive skills) at the expense of others; (c) they were too

specific with respect to the particular activities that were to be done; or (d) they failed to integrate a home/family component with a center-based approach. In short, most of the curricula reviewed were based on nationally accepted approaches to early education with non-handicapped preschool students; consequently, the PANDA staff was unable to find an existing curriculum that could address the wide variety of needs exhibited by the students in the class as well as their criteria and goals for the program.

Review of the Literature

Prior to the passage of the Handicapped Children's Early Education Act of 1968, there were very few programs available to meet the needs of delayed, retarded or multiply handicapped infants and preschool children, and such programs as were available tended to be private residential or custodial facilities (Bailey & Bricker, 1984). The enactment of P.L. 94-142 in 1975, requiring public schools to provide appropriate educational services to handicapped students between the ages of 3 and 21, increased the options available to families of handicapped children.

Unfortunately, a loophole in the law allowed special education services for handicapped students between the ages of 3 and 5 to be discretionary within the respective

states (Edmister & Ekstrand, 1987). This loophole left preschool services dependent upon each state's financial stability and the political clout of its educational lobbyists, resulting in inconsistent availability and great discrepancy in the quality of services provided from state to state. As of 1986, only 16 states had entitlement programs for handicapped children between the ages of 3 and 5 (Meisels, Harbin, Modigliani, & Olson, 1988). Section 619 of P.L. 99-457 closes this loophole and guarantees appropriate early intervention to eligible children from ages 3 through 5. In implementing this law, the following questions will have to be answered: What constitutes appropriate early intervention? Who should provide the necessary services? How will eligibility for these services be determined? How will the effectiveness of these programs be measured?

Statistics provided by the National Center for Education Statistics, based on data supplied by the U.S. Census Bureau, suggest that approximately 4,000,000 children will be enrolled in preschool programs during the 1988-1989 school year (1985). From this pool, approximately 5% will be identified as speech impaired, mentally retarded, multiple-handicapped, hearing impaired, physically handicapped or visually impaired

(Hallahan & Kauffman, 1986). Consequently, one can conclude that there are about 200,000 handicapped preschool children in need of some type of early educational intervention in this country.

Programs available to these children have ranged from highly structured, teacher directed, cognitive-oriented approaches to non-didactic, student-oriented, developmental methods. Programs also vary with respect to the degree of parental involvement, the age at which intervention starts, the type of program (home or center-based, full or half-day), and the types of children served (White, Mastropieri, & Casto, 1984).

Mayer (1971) describes and compares four different program models along the following dimensions: degree of teacher-child interaction, child-material interaction, and child-child interaction. The "child-development" (or "traditional") model, which has served as the basis for most preschools serving middle-class populations, as well as the beginning phase of the Head Start program, is a loosely structured approach that allows children to choose and change activities according to their particular interests. It emphasizes child-child and child-material interactions while de-emphasizing teacher-child interaction as the basis for learning.

In the "verbal-cognitive" classroom (based on the Ypsilanti Perry Preschool Project), the teacher takes a much more directive role, planning specific activities that often require her to be the center of the students' attention. Continuous communication between teacher and students is viewed as a key component of learning. Because this approach utilizes activity centers similar to the child development model, there is a high degree of child-material and child-child interaction; however, the emphasis on the teacher's role as facilitator also results in a high degree of child-teacher interaction, which makes this model the most balanced of the four that Mayer describes.

The third approach, the "sensory-cognitive" model, is based on the Montessori method, and features a quiet environment where children acquire sensory, "real-life" and writing and arithmetic skills by interacting with highly structured materials. In this classroom, the children direct their own learning, and the teacher stays very much in the background except to explain how a particular material is to be used. The art and dramatic play components found in the previous two models are not included in the sensory-cognitive approach. Consequently, this model features a very high degree of child-material interaction, a lesser amount of child-child

interaction and a minimal amount of child-teacher interaction.

The last model, based on Bereiter and Englemann's academically-oriented preschool, Mayer calls the "verbal-didactic" model. Unlike the models previously described, this approach is designed to be used exclusively with disadvantaged children, and is intended to equip them with the skills necessary to succeed in first grade. As a result, there is a great deal of emphasis on direct instruction in language, arithmetic and reading, with much lesser amounts of time allotted to music and semi-structured play. Intense oral drill directed by the teacher is a key feature of this model, resulting in a very high degree of child-teacher interaction and minimal amounts of child-child and child-material interactions.

Judging the efficacy of these early intervention program styles is hindered not only by differences in program content and philosophy, but also by difficulties in defining the population and in the experimental design and measurement approaches employed (Bailey & Bricker, 1984). According to Bailey and Bricker, experts have been unable to reach a consensus in their attempts to define and describe different handicapping conditions, resulting in misdiagnoses and inappropriate

placements that seriously compromise many evaluation efforts. In addition, the difficulty of establishing control groups and the scarcity of measurement instruments suitable for handicapped students make it difficult to conduct an objective evaluation of program efficacy. In his 1988 review of early intervention research, Phillip Strain observes that most efficacy research creates "winners" and "losers." He believes that in their selection of topic, study design and dissemination of results, researchers (the "winners") tend to ignore the very children and families (the "losers") for whom the services are being provided, thus effectively disenfranchising them from the process of setting scientific priorities and contributing to the improvement of services.

Strain (1984) suggests that our dependence on norm-referenced tests as primary indicators of student progress results in significant underestimations of student abilities. Casto, White and Taylor (1983) concur, citing inadequate techniques for summarizing apparently discrepant results, the narrowness of the outcome measures considered, and inadequate consideration of long-term effects as further obstacles to efficacy studies. They point out that many evaluation studies also fail to consider cost data in assessing the worth of a program, and suggest that failure to consider all

of the identifiable costs, or failure to consider the program effects in relation to the costs may seriously compromise the validity of the evaluation results.

Despite the many problems inherent in trying to evaluate early intervention programs, many researchers have attempted to document the observable effects of preschool programs on handicapped children. Using a meta-analysis technique developed by G. V. Glass (1976), Casto and Mastropieri (1986) found a positive mean effect size across 74 studies of heterogeneous (but primarily mentally retarded) groups of handicapped children receiving various types of early intervention services. The intervention groups exceeded the mean effect size of the control groups on standardized intelligence test data and related cognitive assessments by almost one standard deviation (.85 SD). In a similar analysis of efficacy studies focusing exclusively on Down's Syndrome children, Guralnick and Bricker (1987) found cognitive gains averaging 8 to 12 I.Q. points from pre- to post-test measures.

Individual studies have documented similar or even stronger results. In their efficacy study of the HICOMP project, Bagnato and Neisworth (1980) evaluated the progress of 16 multiple-handicapped 2- to 5-year-olds attending a center-based preschool emphasizing

individualized prescriptive interventions. Using the Intervention Efficiency Index, they found greater than baseline rates of development on all four subscales of the Gesell Developmental Scales assessment instrument. Bricker and Dow (1980) analyzed the progress made by 50 severely and multiply handicapped students at the Debbie School Project. They found that the mean percentage of items passed on the Uniform Performance Assessment System (UPAS) increased significantly between pre- and post-testing. In addition, they completed a multiple regression analysis indicating that pre-test scores, age at pre-testing and length of involvement were the best predictors of the amount of progress made.

The degree of parental involvement in early intervention appears to be another significant factor in predicting the amount of progress that will be made by participating students. According to Cartwright (1981), the rationale for parent involvement in early intervention programs emerges from the following sources: (a) legal mandates to include parents in advisory and participatory roles; (b) research literature documenting the positive influence of parent participation on child performance; and (c) a common-sense analysis of the nature of childhood and the traditional role of the family. While the degree of parent involvement may

vary significantly from program to program, Mack (1988) has described several trends in the evolving design of parent intervention components. These trends include: the provision of accurate information about the ramifications of the child's disability; the development of the parents into efficient partners who can contribute to the education of their child; clear explanations of the safeguards available to ensure a "free, appropriate public education in the least restrictive environment"; clear explanations of the meaning of the individualized program and the activities that can be done at home to reinforce school services; the review of due process rights and referral to child advocacy organizations; and the provision of contacts necessary for parents to create support networks.

Several studies have documented the importance of parental involvement in predicting the success of early intervention programs. For example, early assessments of three groups of Down's Syndrome children (one experimental and two control groups), beginning at age 1 and continuing through age 10, revealed significantly greater progress in DQ/IQ, personal-social and speech skills made by students participating in the East Kent Early Intervention program, a center-based program emphasizing individual and small group therapy

and a high degree of parental involvement and training (Ludlow & Allen, 1979).

The importance of parental involvement is also reflected in a study by Revill and Blunden (1979) employing 1- to 4-year-old developmentally handicapped students participating in a home-based program (The South Giamorgan Intervention Project) emphasizing home visits and parental instruction designed to enhance individually identified targeted behaviors. Using the Portage Checklist and Griffiths Mental Development Scales as indicators of progress, Revill and Blunden found that both experimental groups attained, on the average, four Portage checklist skills during each month of baseline, compared to seven skills per month during the intervention periods. Similarly, the two groups attained three times as many landmarks on the Griffiths test during the intervention period as were attained during the baseline period.

The issue of intensity of intervention as a factor influencing developmental outcomes for handicapped children has been addressed in a study by Lovaas (1982) focusing on children identified as autistic. In his study, two groups of autistic children received similar intervention but for substantially different amounts of time (40 hours versus 10 hours of individual therapy per

week). Using a criteria based on academic success in school, normal IQ and teacher ratings of social/emotional adjustment, 10 of the 19 students in the intensive treatment group were identified as "cured," while no children in the less intensive treatment group met the aforementioned criteria. In addition, only 1 of the 19 intensive treatment students was placed in a class for the autistic or mentally retarded, while 14 of the 17 less-intensive treatment students were so placed.

Taylor, White and Pezzino (1984) caution against drawing blanket assumptions that "more is better" based on studies like the Lovaas one described above, pointing out that the "accurate determination of the relative worth of programs requires a simultaneous analysis of both the effectiveness (or outcomes) and the costs of intervention alternatives" (p. 76). In their cost-effectiveness analysis of full-day versus half-day programs for communicatively disordered (CD) and mentally retarded students, they found that half-day programs were more cost-effective for mentally retarded students, while full-day programs appeared more cost-effective for communicatively disordered students. However, they noted that when contributed resources such as parent time were considered as costs, the cost-effectiveness of full-day programs for CD children decreased substantially.

The extent to which severely handicapped children should be integrated with mildly or non-handicapped students is another issue confronting researchers in this field. Bricker and Sheehan (1981) found significant differences from pre- to post-test performance for non-handicapped, at-risk, mildly, moderately and severely handicapped children in an integrated program comprised of five major components: intervention, parent involvement, support services, training/dissemination and evaluation. They were especially pleased with the progress of the normal and at-risk students because of their belief that integrated or mainstreamed programs are beneficial for both handicapped and non-handicapped children. Guralnick (1981) also advocates integrated programs, citing several studies in which handicapped students integrated into regular preschool settings made similar academic/cognitive gains to children in segregated programs, but were more competent in their social skills as a result of their integration into a regular preschool program. Furman, Rahe and Hartup (1980) concur, noting that the use of more developmentally advanced peers as teachers/models can result in "considerable and occasionally dramatic" success for mildly handicapped children.

Despite the large number of studies lauding the academic progress made by handicapped students in early

intervention programs, some researchers suggest that these results may be misleading due to methodological problems in evaluation. In their study of 13 early intervention programs utilizing degree of child change as the index of program effectiveness, Bailey and Bricker (1984) found that all of the programs reported positive outcomes for their students. However, they cautioned against drawing premature conclusions due to the variability in all dimensions of these programs and the methodological limitations (such as lack of a control group) of the efficacy studies.

In a similar analysis of special education early childhood projects approved by the Joint Dissemination Review Panel, White, Mastropieri and Casto (1984) found that although these 21 projects had been chosen as outstanding examples of early intervention projects, all of them suffered from major internal validity threats such as maturation, history, instrumentation, testing, regression, selection bias or experimental mortality. Consequently, they suggest that while the effect size results reported by these programs are very promising, "the methodological problems with all the research designs of these projects create serious doubt as to the confidence with which these effects can be attributed to the treatments" (p. 23).

In addition to the methodological problems faced by evaluators of early intervention programs, there is a paucity of research examining the effectiveness of the different methods or approaches being used in these programs. Quite often, curriculums are described either incompletely or incorrectly, making legitimate comparisons between programs difficult or impossible. According to Powell (1986), "a major limitation of curriculum comparison studies is that they confound content, activities and materials with teaching techniques," making it difficult to determine whether program content, technique or some other dimension is related to child outcome (p. 61). White et al. (1984) note that of the 21 projects approved by the Joint Dissemination Review Panel, only 15 described their curriculum in enough detail to determine the degree of structure. (However, 93% of those described could be categorized as either very or moderately structured.) Lazar and Darlington (1982) believe that the degree of structure inherent in a curriculum is critical in predicting the effectiveness of the program. They suggest that while non-handicapped students may progress faster in non-didactic or less structured programs, handicapped children require a greater degree of structure if they are to achieve maximum benefit from early intervention programs. Their position

is affirmed in the following studies.

Haywood, Brooks and Burns (1986) developed a moderately structured verbal-cognitive curriculum for high-risk and handicapped students based on the theories of Piaget, Vgotsky and Feuerstein. The results of pre- and post-test measures using the McCarthy Scales of Children's Abilities indicated that children who participated in the verbal-cognitive curriculum showed greater gains not only in the General Cognitive Index, but also in three of the four subscales, than did children who did not participate in the program, even though the comparison students were in other educational preschool programs.

Sprigle and Schaefer (1985) obtained similar results favoring a verbal-cognitive approach in their longitudinal comparison of the Learning to Learn (LTL) and Head Start/Title 1 preschool programs. Disadvantaged students who had participated in the Learning to Learn program achieved higher reading grades in the intermediate grades and were less likely to be enrolled in special education programs than their Head Start counterparts. In addition, LTL students were less likely to have been retained in a previous grade than students who had completed the Head Start program; however, both programs surpassed students in the comparison group who had not

participated in any preschool program on all of the measures assessed.

In their study of the long-term effects of four different preschool programs on sixth, seventh and eighth grade non-handicapped students, Miller and Bizzell (1983) compared the IQ and academic achievement of students from the traditional (child development), the Bereiter-Engelmann (verbal-didactice), the DARCEE and the Montessori (sensory-cognitive) programs. They found no significant differences in IQ among the program groups; however, they did obtain differential effects related to both program and sex with respect to reading and math achievement. Boys from the two non-didactic programs (traditional and Montessori) were significantly higher in achievement than males from the two didactic programs (the DARCEE and the Bereiter-Engelmann). Girls from the didactic programs were slightly but not significantly higher than their counterparts in the non-didactic programs. Boys who had participated in the non-didactic Montessori programs were consistently the highest group in all grades and on all measures. These results were confirmed in another comparison study by Karnes, Plummer and Lee (1978), who also found a lower rate of retention, higher school success ratings and the highest percentage of high

school graduates among their Montessori subjects.

Despite the previously noted problems caused by the lack of research examining the effectiveness of curriculums and techniques, there is a substantial body of research supporting the use of incidental teaching techniques to foster language development among handicapped preschoolers. Historically, speech/language specialists have employed a didactic approach characterized by adult-controlled, massed-trial sessions incorporating operant procedures such as shaping, fading, imitation and differential reinforcement (Guess, Sailor & Baer, 1978). While these methods were successful in eliciting the desired behaviors in specifically language-impaired and moderately to severely retarded children, the didactic approach was grossly inadequate in facilitating generalization of newly learned skills to appropriate communication situations (Costello, 1983).

More recently, speech/language pathologists have embraced the concept of incidental teaching, a method whereby the interactions between an adult and a child that arise naturally in an unstructured situation are used systematically by the adult to transmit new information or to provide practice in developing a communication skill (Hart & Risley, 1975). Incidental teaching episodes are brief, positive, and oriented

toward communication rather than language teaching. According to Warren and Kaiser (1986), incidental teaching differs from the naturally occurring teaching exhibited by most mother-infant dyads in two important ways: (a) general classes of communication or language targets are pre-selected for teaching; and (b) a sequence of increasingly specific prompts is employed to ensure the child's use of the pre-selected targets.

Warren and Kaiser (1988) suggest that incidental teaching techniques are effective for a number of reasons. From a behavioral perspective, incidental teaching incorporates some of the didactic procedures shown to be effective with this population, as well as the "loose teaching," "programming common stimuli," and "multiple exemplars" techniques that have been proven effective in facilitating generalization (Stremel-Campbell & Campbell, 1985). From a developmental perspective, the methods of following the child's lead and teaching to his interests, combined with the establishment of contiguity between the child's attention to an event and its linguistic representation by the teacher have been proven effective in facilitating language development (Hoff-Ginsberg & Shatz, 1982). In addition, the selection of appropriate targets slightly in advance of the child's productive competence, that

may be taught using expanded models of the child's own utterances is particularly conducive to language learning (Bricker & Carlson, 1981).

Equally important from both behavioral and developmental perspectives is the fact that incidental teaching focuses on successful communication rather than language teaching (Warren & Kaiser, 1988). Since there is evidence that the use of language promotes the acquisition and use of more language (Hart & Risley, 1980), an approach that focuses on increasing the frequency of children's talking would logically be more effective than an approach emphasizing the acquisition of specific language structures.

An increasing amount of research examining the effectiveness of incidental teaching has been generated over the past 15 years. In their study of disadvantaged preschoolers, Hart and Risley (1980) found that incidental teaching resulted in significant increases in the use of target language in situations where the teaching procedures were not in effect. They also documented substantial increases in the frequency of language use and vocabulary growth in their disadvantaged subjects when compared to control groups comprised of middle-class children attending a university preschool and children attending an inner-city Head Start program.

Incidental teaching techniques have also been successfully adapted for use with low initiators and/or developmentally delayed or mentally retarded students (Halle, Baer, & Spradlin, 1981; Rogers-Warren & Warren, 1980; Warren et al., 1984). As a variation on the use of incidental teaching to facilitate oral language development, Oliver and Halle (1982) used incidental teaching techniques to teach a mentally retarded child to initiate appropriate signs, and reported generalization to a second trainer and novel opportunities.

In summary, it appears that early intervention preschool programs can positively impact the academic, communication and social skills of students with a variety of handicaps. It is also apparent that the degree of parental involvement, the intensity of intervention and the amount of integration of handicapped with non-handicapped students are influential factors in determining the amount of progress that these students can be expected to achieve. It is less clear which approach or curriculum model is most effective with this population; however, it appears that more structured approaches featuring balanced amounts of child-child, child-teacher and child-material interactions (such as the verbal-cognitive model) may be more effective

for students with handicapping conditions. In addition, it seems likely that the use of incidental teaching techniques is an effective way to facilitate communication skills for this population.

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

General Goals

The general goal of this practicum was to develop a philosophy of education that was appropriate for the population of students served by the PANDA program. The philosophy was to include a rationale for early intervention as well as justification for the use of a cross-categorical approach. Another general goal was to develop a developmental guide and a family intervention component that would: (a) assist the classroom teacher in determining the instructional content of the program; (b) assist the program in meeting the needs of the students' families; (c) provide a developmental foundation for the creation of an appropriate curriculum for this population; and (d) facilitate the program's integration into the family of services provided by the district's special education department.

Specific Objectives

The specific objectives for this project were:

1. Over a period of 6 weeks, the preschool committee will develop a philosophy and rationale for the existence of an early childhood special education program as evidenced by a completed proposal (see Appendix A).

2. Over a period of 6 weeks, the preschool committee will create a developmental guide for use in the district's special education preschool as evidenced by a completed proposal (see Appendix B).

3. Over a period of 6 weeks, the preschool committee will develop a family intervention component comprised of weekly teacher/parent communication and periodic family inservices. The success of the family intervention component will be measured through written surveys and informal interviews to be conducted at the end of each meeting (see Appendix C).

4. Over a period of 8 months, the classroom teacher and speech pathologist will implement the developmental guide in the preschool classroom. The success of the implementation will be measured through interviews with the program's staff and observations recorded in the writer's weekly log.

5. Over a period of 8 months, the preschool committee will evaluate the usefulness of the developmental guide using an Intervention Efficiency Index that relates student progress to the amount of time spent in the program. The guide will be considered a

success if 14 of the 20 students in the program achieve an Intervention Efficiency Index score of 1.0 or above. The effectiveness of the program will also be evaluated subjectively by the PANDA staff and by independent observers who will be invited to observe the classroom over the course of the school year.

Evaluation Instruments

Because objectives #1 and #2 dealt with the development of materials needed to implement the practicum, the inclusion of the philosophy/rationale and developmental guide in the completed practicum proposal provided the necessary evidence that these objectives had been achieved.

Objective #3 had two components, a commitment to increased home/school communication in the form of weekly written or taped messages from the classroom teacher, and a commitment to providing parents with information and resources that would strengthen their parenting skills. The first component of objective #3 was to be measured using a chart that would remain on the teacher's desk next to a cassette rape recorder. The chart was to include each student's name and would have a column for each week of the school year. The teacher was to make an entry on the cassette as needed

during the school day, and was to make a check beside the student's name after transcribing the message onto paper during her break. Written messages were then to be placed in student cubbyholes to go home at the end of the school day. The completed chart, as well as the taped cassettes, were to serve as a record of the teacher's communication with each child's family.

The second component of objective #3, family support group meetings addressing parent-selected topics of concern, were measured using a teacher-made survey that was administered at the end of each meeting (see Appendix C). By completing the survey, parents were able to indicate the extent to which they found the session informative, entertaining and relevant to their particular needs. The results of the surveys were tabulated and used both in evaluating the success of the program and in making plans for the following school year. In addition to the written surveys, the PANDA program staff conducted informal interviews with inservice attendees to solicit additional information regarding the effectiveness of the meeting.

The implementation of the developmental guide in the preschool classroom (objective #4) was monitored primarily by the writer, who observed the classroom on a weekly basis and maintained a written record of

observations and impressions. Further information regarding the actual use of the developmental guide was gathered through periodic interviews with the program's staff. In these interviews, the writer attempted to determine staff satisfaction with the guide as well as concerns and/or problems with the guide that arose as the year progressed.

The effectiveness of the guide (objective #5) was measured through student achievement and subjective evaluation. The developmental guide was designed to allow the classroom teacher and speech pathologist to use it as a developmentally-based assessment instrument. Student performance on this measure was used to derive an Intervention Efficiency Index (Bagnato & Neisworth, 1980) that assisted the PANDA staff in evaluating the effectiveness of the program. The Intervention Efficiency Index (IEI) is a measure that relates student progress to the amount of time spent in the program. As Bagnato and Neisworth describe it, the Intervention Efficiency Index is "a criterion-based index measuring individual child progress as a function of program participation" (p. 268). To generate an IEI, pre- to post-test progress (progress = number of months gained) in each skill area was collected for each student. The gain scores were then added across developmental areas and the sum divided

by the number of months spent in the program, thus yielding an index of program effectiveness. Using this technique, effective programs should yield indexes of 1.0 or above.

In addition to generating a total IEI, the effectiveness of the guide for each developmental skill area was evaluated by generating separate IEIs for the motor, self-help, cognition/language and social/emotional skill areas. In summary, the Intervention Efficiency Index allowed the PANDA staff to evaluate child progress and program effectiveness by integrating and comparing developmentally-based assessment data.

In addition to the use of IEIs to measure child progress and program effectiveness, the staff invited independent observers with expertise in the area of early childhood education to observe the classroom and offer comments regarding the strengths and weaknesses of the program. The writer also interviewed each member of the PANDA staff in order to gather additional information regarding the ease of implementation of the guide, its completeness, and the extent to which it would facilitate the development of a more comprehensive curriculum for the program. Necessary changes and suggestions for improvement were also solicited. The

results of the interviews, observations and IBI effectiveness measures were then summarized and shared with the PANDA staff.

CHAPTER IV

SOLUTION STRATEGY

Evaluation of Possible Solutions

The PANDA program was developed primarily in response to parent requests for instructional services for their handicapped preschool children, as well as a desire to take advantage of grant funds available for the development of early intervention programs under P.L. 99-457. As a result, little preliminary research was done regarding effective teaching strategies, important curricular components or the specific characteristics of programs considered most effective with this population.

A recent review of the literature indicates that early intervention programs can be effective in producing cognitive and social gains in handicapped preschool children (Casto & Mastropieri, 1986; Guralnick & Bricker, 1987), and that moderately structured programs featuring balanced amounts of teacher-student, student-peer and student-material interactions may be more effective with these children than less structured programs emphasizing materials over verbal interaction (Haywood, Brooks, & Burns, 1986; Lazar & Darlington, 1982; Sprigle & Schaefer, 1985).

In addition, the extent of parental involvement in early intervention and integration of non-handicapped with handicapped students have been shown to be important components of effective programs (Bricker & Sheehan, 1981; Revill & Blunden, 1979).

A variety of approaches for dealing with this population were considered by the district. Options included tuitioning students out to districts or social service agencies with programs already in place, providing a screening service followed by referral to appropriate agencies, developing a home-based program where a district employee would visit student homes and "teach" the parents how to facilitate the development of their child, a center-based program where students would assemble in a central location to receive intervention services from a variety of special education professionals, or providing no services until mandated and financed by the state legislature.

Tuitioning-out was deemed unacceptable by the district, not only because of the costs that would be incurred, but also because the district would have to relinquish control over the quality of services to be provided. A screening and referral service was determined to be inadequate in meeting the needs of the students, because follow-up services would be too expensive for most of the district's families. A

home-based program was ruled out as an inefficient use of district personnel, since most of the students were widely scattered across the more than 84 square miles encompassed by the district. Providing no services until mandated was never seriously considered, both for moral reasons, and because district administrators were convinced that early intervention could save money by reducing or eliminating the need for extensive special education services later in the student's academic career. Thus, through the process of elimination, it was determined that a center-based program where a group handicapped students could be served by a variety of special education professionals would be the most effective and cost-efficient method of addressing the needs of this population.

However, the decision to provide center-based services for handicapped preschoolers did not address the problems resulting from the lack of an appropriate curriculum to coordinate and direct the efforts of the teachers working with these students. The obvious solution to this problem was to purchase an existing commercial curriculum for use on either a permanent basis, or until a more satisfactory one could be located or created. Unfortunately, a selective review of existing curriculums revealed that each program had

flaws that made it inappropriate for the purposes of the PANDA program.

Some of the programs were too specific with respect to how the objectives were to be taught and what activities were to be used, thus reducing the ability of the teacher to be flexible in meeting the individual needs of her students. Other programs placed too great an emphasis on one skill area (or areas) at the expense of others, which contradicted the committee's goal that the curriculum be comprehensive and balanced. Still others were designed for specific populations and thus were inappropriate for a cross-categorical program model. In addition to the aforementioned problems with existing curricula, some of the programs reviewed were prohibitively expensive for a grant-funded program with a very tight budget.

In light of these inadequacies, it was the consensus of the committee that the development of a curriculum designed specifically to meet the needs and goals of the PANDA program would be the most effective way to meet the needs of the variety of handicapped students served by the program. It was also the committee's hope that the creation of a curriculum designed specifically for the PANDA program would foster a sense of "ownership" in the personnel involved, thus increasing their

commitment and desire to assist the program in the realization of its goals.

Description of Selected Solution

After reviewing some available curricula and clarifying their philosophy of early intervention, it was the decision of the curriculum committee that a comprehensive curriculum based on existing knowledge of normal development should be developed. It was the belief of the committee that the development of this curriculum would allow the PANDA program to: (a) become a more integral component of the district's special education services; (b) more easily accommodate changes in personnel; and (c) provide services that would ensure significant progress in motor, cognitive, communicative, self-help and social/emotional skills for students with special needs. In addition, it was hoped that the development of a core curriculum would facilitate the program director's long-term goal of creating a coordinated curriculum that would present the content and competencies necessary to ensure maximum academic gains for self-contained special education students from preschool through grade twelve.

To accomplish this objective, a curriculum committee made up of the PANDA program's classroom teacher, the chairperson of the speech/language department, the

program director, and the writer was created. (Committee members were selected according to their involvement in the program or the expertise that they could contribute to the project.) Under the direction of the writer, the committee created a developmentally sequenced developmental guide addressing motor, self-help, cognition/language and social/emotional skill areas, based on normal milestones of child development. The classroom teacher began using the developmental guide as a basis for program planning in September of 1988, following the collection of baseline evaluation measures. The writer monitored the implementation of the guide on a weekly basis by comparing the teacher's lesson plans to the goals identified in the developmental guide. She also kept a written log of observations concerning the effectiveness of the implemented teaching plans in class. In addition, the writer modeled and encouraged the staff to use incidental teaching techniques (particularly with those students whose primary handicapping condition was Speech/Language), offered assistance in using the guide for program planning, and videotaped class sessions for use in evaluating the program and as a teaching tool for parents at support group meetings.

In conjunction with the implementation of the developmental guide, a family component featuring weekly

teacher/parent communication and periodic support group meetings addressing parent-selected topics was implemented. The writer surveyed parents to determine which topics were most relevant to the needs of each family, after which the curriculum committee located and scheduled speakers to address the inservice attendees. In addition to the guest speaker, each family inservice provided the opportunity to observe a videotaped session of the preschool accompanied by narration describing the activities and methods used to facilitate student growth. In this manner, parents became more aware of the everyday activities occurring in the classroom and hopefully acquired some techniques for dealing with their children at home. The success of the parent inservices was judged using written surveys completed at the end of each inservice meeting, in conjunction with informal personal interviews conducted by the classroom teacher, speech pathologist and writer to assess parent satisfaction with the program and possible goals for the future.

In April of 1989, a formal evaluation of the program, the guide and the parent education component was conducted. The formal evaluation included measures of student progress in various developmental areas as well as staff input with respect to the adequacy of the developmental guide and the improvements needed to make

it more useful to program personnel. The writer assembled Intervention Efficiency Indexes for each student to assist in the evaluation of the program's effectiveness. In addition, the committee used information gleaned from informal parent interviews to assess satisfaction with the program and curriculum, particularly with respect to the usefulness of the family inservice component. The writer also used the results of completed written surveys as well as staff opinions to evaluate the effectiveness of the different guest lecturers. The writer then summarized these results, developed recommendations for future projects of this nature, and disseminated information about this project to the appropriate state and national organizations.

Report of Action Taken

The curriculum committee, whose members included the PANDA classroom teacher, the program director, the writer and chairperson of the speech/language department, conducted 5-hour sessions for 7 weeks during the summer of 1988. At the initial meeting, the writer gave each committee member an outline of the goals to be achieved and a tentative schedule for the remaining 6 sessions. Committee members were then asked to identify the qualities they felt were most characteristic

of good preschool programs as a starting point for developing a philosophy. Fortunately, the committee members had no problems agreeing on the critical elements of their philosophy of early education, so the Statement of Philosophy (Appendix A) was "roughed out" by the end of the first session.

The following sessions were spent determining the content and sequence of the material to be included in the developmental guide. Using existing assessment instruments such as the Battelle Developmental Inventory (LINC Associates, Inc., 1984), the Bayley Scales of Infant Development (The Psychological Corporation, 1969), the Brigance Inventory of Early Development (Brigance, 1983), the Receptive-Expressive Emergent Language Scale (Bzoch, 1970), the SEED Developmental Profile (Herst, Wolfe, Jorgensen, & Pallen, 1976), the Assessment and Programming Guide for Infants and Preschoolers (Umansky, 1976), and the EASIC: Evaluating Acquired Skills in Communication (Riley, 1984), the committee identified four main areas to be included in the developmental guide.

The areas included in the developmental guide were: Motor Skills; Self-Help Skills; Cognition/Language Skills; and Social/Emotional Skills. These areas were selected because they were the most common areas assessed

by the evaluation tools used by the program's staff. Many of the evaluation instruments treated language and cognition as separate areas; however, it was the feeling of the committee that language and cognition are highly inter-related and co-dependent, and that most preschool tasks could not easily be identified as either cognitive or linguistic. In addition, the committee felt that treating cognition and language as two separate areas would require many tasks to be listed in both sections, which would create a great deal of unnecessary redundancy.

Once the developmental areas were selected, the writer went to the literature to develop a rationale for the importance of each area to the development of the student. The rationales were then brought to the committee for evaluation and revision. It was particularly helpful for the writer to have the input of the classroom teacher in developing rationales for the Motor and Self-Help skill areas, because she had a great deal of previous experience with multiple- and physically handicapped students, and was able to point out how certain skills serve as foundations or pre-requisites for later skills.

Upon completion of the rationales for each developmental area, the committee began to assign task

objectives and their approximate ages of acquisition. It was the decision of the committee not to include tasks that were not considered relevant to the preschool experience, even if the tasks were assessed in one or more of the various evaluation instruments. Also, in assigning approximate ages of acquisition, the committee used a combination of resources, including the available research literature and existing evaluation instruments, as well as their own professional judgment and personal experiences in child-rearing. However, the various sources employed by the committee did not always agree on the age at which a certain developmental milestone was usually achieved, so it was recognized by the committee that the ages of acquisition had to be considered approximations only. The Statement of Philosophy, Skill Area Rationales and Developmental Objectives were completed by the end of the summer work session (see Appendices A and B).

The beginning of the school year saw 17 students enrolled in the PANDA program. Only 2 of the 17 children were female. Ten of the students were 4 years old at the beginning of the school year, while 7 of the children were 3 years old. Actual chronological ages ranged from 3 years, 4 months to 4 years, 11 months. Fourteen of the 17 students were identified as speech

handicapped, 2 were labeled multiple-handicapped and 1 was identified as physically handicapped.

Shortly after the beginning of the school year, several things occurred that impacted upon the writer's practicum plans. First, there was an administrative shift in responsibility for the program. The new director had a strong background in early intervention, but had had no involvement in or knowledge of the writer's project. Consequently, she needed to be briefed and her support enlisted in order to make possible the implementation of the project, and although she was enthusiastic about the parent training component of the writer's practicum plans, she felt that it was not a particularly auspicious time to undertake a major project like curriculum development.

Another significant event occurring within the first few weeks of school was the cutting back of the PANDA program's speech pathologist from 2.5 to 2 days per week. This shift in time allocation eliminated the one-half day's planning period that the classroom teacher and speech pathologist had formerly used to develop content units and to coordinate activities. As a result, the PANDA staff felt that they were not being supported by the administration in their efforts to develop a quality program. Consequently, they felt

somewhat stressed and overwhelmed, and were not inclined to put a great deal of uncompensated effort into an additional project, despite the potential benefits.

There was an additional political faux pas that impacted upon the writer's practicum plans at the beginning of the year; however, she did not become aware of the problem until several weeks into the school year. The curriculum committee that met during the summer was created by the former director of the program. The members of the committee all assumed that the PANDA program speech pathologist had been asked to serve on the committee but had declined because she had plans for an extensive vacation. However, the former director of the program did not invite the PANDA speech pathologist to be a part of the committee, probably because she felt that the area of speech and language was already adequately represented by the department chairperson and the writer. Consequently, the PANDA speech pathologist knew nothing about the practicum's goals and had no personal investment in seeing the plans implemented. This unintended exclusion, in conjunction with the cutting of her hours with the program, may have caused the PANDA speech pathologist to have some initial reservations about the writer's presence in the classroom.

Against this political background, the writer felt that it was very important to the ultimate success of the practicum that she take a low key approach to the implementation of the practicum, downplaying her presence in the classroom and supporting the teachers in their grievances. This approach turned out to be critical to the success of the project, although it was very discouraging to the writer at the time. As time passed, the classroom staff did become more supportive and accepting of the writer's presence in the classroom, although her role remained closer to that of a helper/resource than a leader/director throughout the course of the school year.

Although the first month of school was devoted primarily to student observations and assessment, the classroom staff did develop an implementation plan and daily schedule based upon their philosophy of education and the content included in the developmental guide. Their plan of action emphasized the use of incidental teaching techniques as an effective means of teaching new skills and facilitating their generalization to other settings (Appendix D).

Basically, the content of the program was loosely organized into monthly thematic units about subjects such as food, animals, clothing or transportation. Each

day began with a period of free play during which the children were free to choose their own activities while the classroom teacher talked with parents or organized the day's events. On many days, the speech pathologist would use this time to work with small groups of children on a particular speech or language goal. Following an opening circle during which class business (nametags, attendance, calendar, student jobs, etc.) was conducted and an overview of the day's or week's activities was provided, the class would be divided into smaller groups and assigned to various thematic activities emphasizing different skill areas. Students rotated among the various activities for approximately 45 minutes, after which they lined up to wash their hands for snacktime. Snack was provided by a different student each day, which ensured variety and provided many opportunities for conversation. After the 25 minute snack period, the students went outside (weather permitting) for a 20 to 25 minute play period. Following the play period, the students gathered for closing circle, where the teacher or speech pathologist led them in songs, stories or group games related to the month's theme. Weekly activities also included a trip to the school library and a group cooking activity, as well as seasonal activities related to approaching holidays.

Towards the end of the first month of school, the writer decided that it was time to begin pushing for some implementation of her practicum goals, so she brought in the tape recorder and student charts that were to facilitate weekly communication between the classroom teacher and the parents of her students. She also revised and sent out the Parent Support Group Survey letter (Appendix C). When all of the surveys were returned (approximately 12 days later), the writer tabulated the results and shared them with the program staff.

The writer was aware that the completion of the baseline measures for each student was going to be a time-consuming and laborious task, so in early October, she volunteered to take a day off from her regular teaching assignment in order to assist the staff in completing the developmental guide baselines for each student. At that time, there were 17 students enrolled in the program, and it took approximately 17 man-hours to complete the baseline charts for both classes. In completing the baselines, the teacher and writer made notes of necessary revisions in the sequence and/or wording of the objectives. They also found that they could not respond to all of the objectives presented in the guide because they had not had the opportunity to

observe all of the behaviors included in the guide. In addition, they found that it was more effective to complete each objective for all of the students at the same time, rather than completing the entire baseline, one student at a time. Completing all of the baseline objective by objective gave the teacher and the writer the chance to compare performance across students, which made "judgment calls" a little easier to ascertain.

During this same meeting, the classroom teacher and the writer discussed the unwieldiness of the proposed parent communication plan. The classroom teacher felt that it was very disruptive to drop everything to record messages on student progress on the tape recorder, and that there really was not time to transcribe the messages so that they could go home on the same day. The writer concurred, and since the classroom had its own phone, it was decided that the teacher would telephone parents when she had particularly important or timely information to share. In addition to using the phone, the classroom teacher had access to several of her students' parents on a daily basis as they arrived to drop-off or pick-up their children from class. It was also decided that general information about class activities would be communicated through monthly newsletters that the students could carry home. In this manner, the

classroom teacher and writer hoped to increase the quantity and quality of parent/school communications without unduly burdening the classroom teacher or taking away from instructional time.

In late October, the program staff, writer and speech department chairperson met with the new program director to discuss progress and to make plans for the parent-inservice component of the practicum's goals. It was also suggested at that meeting that the developmental guide might be more useful if it were organized by age rather than by skill area, so the writer agreed to rework the format of the guide over the following months.

At that time, an additional political problem surfaced that required some fence-mending on the part of the writer. When the writer initially investigated the possibility of conducting this practicum, she went to the Director of the Program and sought her support and permission. Once that was obtained, she mistakenly assumed that nothing more was required. However, as with any large bureaucratic organization, there are channels and protocols to be followed, and the writer was unaware of, and neglected to follow the procedures necessary in order to conduct research. In this particular district, any type of educational

research project requires the approval of the Director of Research and Evaluation as well as the district's school board, prior to implementation.

Consequently, an emergency meeting with the Director of Research and Evaluation was scheduled in order to obtain "late permission" to conduct a project that was already several months old! At that meeting, the writer explained her practicum goals and evaluation measures, as well as her intended methods of maintaining the confidentiality of everyone involved. After completing a written application, the Director agreed to take it to the Board for approval. Approval was granted, much to the writer's relief, and she learned a valuable lesson in political protocol in the process.

In early November, the curriculum committee met again to discuss the parent inservice component of the practicum's goals. The results of the survey conducted in September suggested that communication, parenting skills and behavior control were primary areas of concern for the parents involved in the PANDA program. Consequently, the committee decided to focus on these three areas. It was decided that the first inservice would address communication skills and would be held in late November. The classroom teacher and speech pathologist agreed to present the workshop. The writer

offered to take care of publicity and childcare. (It was the feeling of the committee that childcare would be an important drawing card in encouraging attendance, and since district policy required the presence of a certified teacher in the supervision of children on any district campus at any time, the writer was enlisted, along with the classroom aide, to provide childcare.)

The parent survey had also indicated that weekday mornings or weekday evenings were the most convenient times for the majority of parents in the program, so the first workshop was held on a Wednesday morning (PANDA classes did not meet on Wednesdays). Approximately 14 parents attended the first workshop, including two fathers. During the presentation, the two presenters gave an overview of language development, emphasizing the role of parents as facilitators and models, followed by a description of the language program within the classroom (Appendix H). The classroom teacher and speech pathologist role-played examples of facilitation, expansion and modeling, then solicited questions about communication development from the audience. Also included in the presentation were videotaped class sessions where particular techniques had been employed in order to facilitate communication development. At the end of the 90 minute workshop, the parents were given a survey to gauge their satisfaction with the

workshop and to solicit suggestions for improvement; however, the survey responses were uniformly positive and very appreciative of the time and effort spent in preparing the workshop.

Also in November, the first of the objective observers, a speech pathologist in private practice who had worked with some of the PANDA students prior to their participation in the program, came to observe and evaluate the program. She observed the morning session of the program, and later shared her thoughts with the speech department chairperson, who then passed them along to the writer.

In early December, three additional students were enrolled in the afternoon session of the preschool, thus filling the last remaining slots in the program. Two of the three new students were 4 year old females. The third student was a 3 year old male. Two of the new students were identified as speech handicapped, while the third was categorized as trainable mentally handicapped. The new students were observed by the classroom teacher, speech pathologist and writer during the remaining weeks in December, and baseline measures on the developmental guide were taken following the Christmas break.

In mid-January, the program was observed by the second of the independent observers, a special education

preschool teacher and psychologist from a neighboring district. They observed the morning session of the preschool, asking questions and sharing their opinions with the classroom teacher afterwards. She then passed the information on to the writer.

At the end of the month, a second parent workshop was conducted. For this workshop, the program director solicited the services of one of the district's psychologists, a doctor with an extensive background in family dynamics, who had written several books on parenting and behavior control. To accommodate his schedule, and to provide an opportunity for working parents to attend, it was decided to hold the workshop on a weekday evening. Childcare was not provided, because the classroom speech pathologist and aide were not able to attend the session. Once again, flyers were sent home several times during the weeks preceding the workshop in order to remind and encourage parents to attend.

The workshop was attended by seven parents, as well as the classroom teacher, program director, and the writer. Despite the disappointing turnout, the presenter gave an excellent talk on children's need for love, structure and excitement. In the course of his talk, he described signals or behaviors that indicate

when a need is not being met, and he gave suggestions for meeting needs and controlling problem behaviors in a positive fashion (Appendix H). He then solicited questions from the audience regarding specific behavioral concerns. The second workshop lasted for about 1 hour and 15 minutes, and evaluation surveys were again overwhelmingly positive, although a couple of the parents felt that his comments were directed toward a more "normal" population, and that some of his suggestions were not applicable to handicapped children.

In February, the writer began to take a more active role during her weekly visits to the classroom, occasionally leading small groups and modeling incidental teaching techniques where appropriate. She also attended the state's first Joint Conference on Early Intervention and Preschool Education. At this conference, current state and federal regulations with respect to P.L. 94-142 and P.L. 99-457 were explained. In addition, the state social service agencies that currently provide services to these children gave presentations about their responsibilities, and existing preschool programs identified by the State Department of Education as innovative or outstanding were described and showcased.

The pervasive message throughout the 2-day conference focused upon the need for collaboration and cooperation between the public and private sectors and among the numerous state agencies involved with handicapped children. There was also a lot of emphasis placed upon the primacy of the family as decision-makers in the intervention process, and on the importance of integrating handicapped students into a normal environment with non-handicapped students whenever possible. The writer, classroom teacher, program director and speech department chairperson came away from the conference with greatly increased awareness of existing delivery models and trends in the provision of services to this population of children.

During the month of March, a professor of child development at a local community college was invited to observe the preschool and to make observations about the strengths and weaknesses of the program. She observed the afternoon session and had a number of suggestions to make with respect to organization and classroom management.

Towards the end of the month, the writer took a day off from her regular duties to assist the classroom teacher in completing the developmental guides for each of her students. Completion of the guides took

approximately 8 man-hours, during which time the writer and classroom teacher discussed the progress of each student and the merits/disadvantages of having the guides organized by skill area versus chronological age. The writer and classroom teacher also discussed possible revisions in the wording and sequencing of certain skill items. For example, both the writer and the teacher felt that the developmental age of acquisition for many of the toileting skills was too early. Even though the ages listed were those cited most often in the standardized assessment instruments used to develop the guide, they felt that the ages indicated on the standardized tests reflected an earlier period during which parents tended to toilet-train their children at a younger age. Since many parents today wait until their child reaches the age of 2 before beginning toilet-training, it was decided to revise the guide to reflect this change in parenting habits.

After completing the post-treatment guides for each student the writer took the guides home to analyze the data. At this point, some decisions had to be made regarding the scoring of the guide. The writer decided to use three errors in five tasks as the developmental ceiling. The 3/5 ratio was selected over three (or five) consecutive errors because the writer felt that

requiring a particular number of consecutive errors might result in inflated scores for those students who exhibited "splinter skills" more advanced than their actual developmental level. When a student advanced to the last three responses in any particular skill area without hitting the developmental ceiling, the writer accepted any error in the last three responses as the ceiling for that skill area.

After scoring the guides, the writer developed a data sheet upon which each student's scores could be recorded and transformed into Intervention Efficiency Indexes (IEIs). IEIs were generated for each developmental area as well as for the overall program (Appendix F). To generate Intervention Efficiency Indexes for each skill area, the writer first measured the number of months of progress made between pre- and post-measurement for each subskill area within the larger developmental skill area. A slight problem arose with the feeding and dressing subskill areas, which were broken down into feeding/drinking and undressing/dressing units. In most cases, the ceilings achieved in the two units were similar, thus yielding one score for the corresponding subskill area; however, in a few instances, there was a discrepancy in achievement between these two smaller units. In these

cases, the writer averaged the two ceilings in order to generate one ceiling level for the entire subskill area (i.e., a 6-month ceiling in feeding combined with a 10-month ceiling in drinking was averaged to yield an 8-month ceiling for the feeding subskill area). Subskill areas such as non-verbal or grasp-prehension skills in which most of the students were able to do all of the tasks during the pre-treatment baseline measurement period were not included in the generation of IEIs. Subskill area progress gains were then averaged to yield an overall progress gain for each developmental area. The overall Program IEI was later generated by averaging the IEIs for the four skill areas.

Following the completion of the data sheets for each student, the writer gave a copy of all of the data sheets to the classroom teacher and speech pathologist for use in parent conferencing or placement decisions. The PANDA staff discussed the results of the progress sheets with the writer, and made several pertinent observations. It was decided that the writer would meet again with the classroom staff and program director after completing her conclusions and results so that additional staff input could be generated and possible future directions for the program could be discussed.

CHAPTER V

RESULTS, CONCLUSIONS AND RECOMMENDATIONS

Results

Implementation of the solution strategy for this practicum required a considerable amount of advance preparation and groundwork, since a philosophy and developmental content guide needed to be in place prior to the advent of the school year. Consequently, the first two objectives, which addressed the development of a philosophy and rationale for early intervention, and the creation of a developmental guide for use in the preschool, were documented through their inclusion in the initial proposal (Appendices A and B).

Objective #3 dealt with the creation and implementation of "a family intervention component comprised of weekly teacher/parent communication and periodic family inservices," with the success of the inservices being measured through written surveys and informal interviews. As was noted in Chapter IV, the initial parent/teacher communication plan, which involved the use of a cassette recorder and written notes, was determined to be impractical and an inefficient use of the classroom teacher's time. Consequently, an alternative plan featuring a monthly

newsletter (Appendix G), periodic phone calls and informal conferences were adopted. Both the writer and the PANDA staff felt that it was very important that all parents be aware of what was being done in the classroom, and the particular successes or problems that their child was experiencing during the school day. Informal interviews of parents conducted as they were dropping off or picking up their children indicated that all of the parents interviewed were comfortable and satisfied with the amount and the quality of parent/teacher communication. One parent observed that "it's nice to know when _____ does something good at school--especially since he doesn't usually behave that well at home"!

The success of the parent inservices was measured using written surveys (Appendix C) and informal interviews. The selection of topics for the parent inservices was determined from an initial survey that was returned by 13 of the 17 families enrolled in the program at the beginning of the year. The results of the initial survey indicated that parents were primarily concerned with behavior control, parenting skills and expanding their child's communication skills. Two inservices were held during the implementation of this practicum--one addressing communication skills and a

second one dealing with parenting and behavior control skills. The basic content and publicity flyers used for these two inservices are included in Appendix H. The results of the inservice evaluation surveys are summarized in Appendix I. A third inservice addressing transitioning and mainstreaming issues was scheduled for the end of the school year.

At the end of each inservice meeting, the writer distributed written surveys to each of the parents in attendance. On the surveys, parents were asked to rate (on a scale of 1 to 5) the usefulness and/or value of the pre-lecture socializing, the speaker's presentation, the videotaped class session and the question/answer period. A space for written comments was included on each survey. Nine of 14 surveys were returned from the initial inservice. Eight of the 9 surveys returned rated all four aspects of the inservice with either a 4 or a 5, which the writer and PANDA staff interpreted as a successful inservice. One of the parents rated the videotaped class session and question/answer period with a 3. In discussing the results of the surveys, the curriculum committee felt that while the videotaped class session and question/answer period may not have been relevant to this parent's particular needs, the majority of parents attending found these activities to

be valuable components of the inservice. Informal interviews of the parents attending the initial inservice confirmed this conclusion, with all of the parents expressing appreciation for the time and effort expended in providing the inservice. One of the parents commented, "It really helps knowing what to expect of my son. Now I know what to try with him."

Attendance at the second parent inservice was much smaller, possibly because it was held in the evening and there were no provisions for childcare. Six of the seven written surveys distributed at the second inservice were returned. Of the six surveys returned, four surveys rated all of the various components with either a 4 or a 5. The remaining two surveys gave lower marks (2s and 3s) to the pre-lecture socializing period. Because of the length of the speaker's presentation, there was not enough time to show the class videotape, so parents were asked not to respond to that item on the survey. In reviewing the results of the surveys, the PANDA staff concluded that the presence of an unfamiliar male speaker (no fathers attended the second inservice) may have been an inhibiting factor that prevented the mothers from freely sharing their experiences. Once again, the comments made in the informal interviews that

followed the inservice were generally positive. One mother noted that the speaker "covered many areas which affect all three of my children." However, another parent felt that the speaker's comments were directed primarily towards non-handicapped children, and that some of the suggestions he gave might not be appropriate for children with extremely delayed communication skills.

Objective #4 addressed the implementation of the developmental guide in the classroom. The success of the implementation was to be measured "through interviews with the program's staff and observations recorded in the writer's weekly log." Interviews with the classroom teacher indicated that the developmental guide was not valuable on an everyday basis, primarily because it was too long and too difficult to find particular objectives for each child on a daily basis. For example, if the teacher had decided to do a scissors and paper task, she would have had to dig through several different pages in each student's 20-page developmental guide in order to determine the child's developmental level with respect to cutting. The teacher felt that it was much easier to begin the children on the task, observe the status of their skill level and then assist them in working towards the next

developmental level.

It was the classroom teacher's opinion that the developmental guides were helpful in three respects. First, the observation period followed by the completion of the baseline data at the beginning of the year assisted the PANDA staff in getting a clear picture of each student's strengths and weaknesses. The developmental guide was more useful than some of the standardized measurement tests in this respect because it was comprehensive and included only those skills that the staff was likely to see over the course of the year. Also, because the guide had been created with the input of the teacher, there were fewer ambiguities about what was "meant" by a particular objective than on some of the standardized tests used to qualify students for placement in the program.

The developmental guide was also valuable in the generation of progress summaries over the course of the year. Using the guides, the teacher was easily able to identify skills acquired since the beginning of the school year, which facilitated the process of writing student progress reports. At the same time, she was able to review the ongoing problem areas of each student and adjust her lesson plans accordingly. The guides were also helpful in discussing student

progress with parents because of their completeness and because the checklist format made it easy for parents to see their child's progress.

Finally, the developmental guide was helpful in evaluating a child's progress for the year, and in making placement decisions for the following year. The time that the writer and the classroom teacher spent completing the guides for each student provided a structured opportunity to evaluate progress in each of the developmental areas and to discuss possible placements for coming year. The classroom teacher observed that her students "looked better" on the developmental guides than they did on standardized instruments, probably because the objectives included in the guide were more relevant to the activities actually occurring in the classroom. Another possible explanation for the discrepancy in results may be related to the fact that the results of the developmental guide are based upon recorded classroom observations, while student performance on standardized measures is based on student responses generated in a highly structured test format.

The writer's review of her weekly logs indicated that the developmental guides were not used consistently in generating lesson plans, possibly because the

classroom staff felt that they knew what each child needed to be working on without referring regularly to the guides. The guides were used most often at the beginning, middle and end of the school year, because those were the periods during which more in-depth analysis of student developmental status were required. The writer did observe that all of the classroom activities recorded in her logs were included in the guides, which suggests that the guides were successful in targeting the appropriate developmental tasks for this age group, and that the classroom staff was adept in selecting developmentally appropriate activities for their students.

Objective #5 specified that the usefulness of the developmental guide in describing student progress would be measured using an Intervention Efficiency Index relating student progress to the amount of time spent in the program. The guide was to be considered a success if 14 of the 20 students in the program achieved an IEI of 1.0 or more. Accordingly, the writer generated a total IEI and an individual IEI for each developmental area for each student in the PANDA program. The results of this activity are summarized in Appendix J.

Thirteen of the 20 students in the program achieved total IEIs of 1.0 or above. Analysis of the individual developmental areas indicated that 14 students achieved IEIs of 1.0 or above in the area of Motor Skills; 13 achieved IEIs of 1.0 or above in the area of Self-Help Skills; 14 achieved IEIs of 1.0 or above in the area of Language/Cognition Skills; and 12 students achieved IEIs of 1.0 or above in the area of Social/Emotional Skills. The initial review of these results indicates that the program is well-balanced in terms of addressing all developmental areas, but that not all students are making significant gains over the course of the school year. However, a more in-depth analysis revealed some interesting points.

Of the 7 students who did not achieve IEIs of 1.0 or above, 3 were identified as physically or multiply-handicapped, a finding that suggests that the physical limitations of these children may have negatively affected their ability to progress. This would be especially true for the areas of motor, self-help and social/emotional skills, since these areas require a degree of mobility and independence not possessed by these students. In addition, 2 of the remaining 4 students identified as speech-handicapped were within or above normal limits for their chronological age on

three of the four developmental areas during baseline measurements, which means that these students could not be expected to make significant gains in these areas over the course of the year. (Both students obtained IEIs of 1.0 or above in the one area in which they were deficient.) Of the remaining 2 students, one had frequent absences (one-two times per week) that would have impacted negatively on his progress, leaving only one student who did not make the kind of progress that would be expected in an effective early intervention program.

The effectiveness of the program was also assessed via the observations of objective observers who were invited to visit the class at various times during the year. The first observer, a speech pathologist in private practice who had worked previously with a few of the PANDA students, felt that the communication activities and the methods employed by the staff were very appropriate and well-suited to the needs of the children. She was particularly impressed by the way that language-therapy was incorporated into the curriculum in a natural manner rather than through structured ("Now we're going to work on vocabulary") language tasks. When asked for comments that might strengthen the program, she suggested that too much

time was wasted in "getting started" and in transitioning between activities. She also felt that individual student goals (i.e., increased use of pronouns, expansion from one to two word utterances, etc.) were not always evident in the interactions of students with the staff, and that non-verbal communication forms (i.e., signing) were not used consistently by all staff members.

The second group of observers included a psychologist and self-contained preschool teacher from a neighboring district. The early intervention program in this neighboring district had experienced high staff turn-over (four teachers in 3 years) and a relative lack of direction since its inception; consequently, the observers were very interested in the logistics of the program as well as the content. The classroom teacher liked the fact that the PANDA teacher was given one work-day each week in which to do home visits, assessments and conferencing. Both the psychologist and the teacher were impressed with the "hands-on" developmental nature of the activities occurring in the classroom, noting that the program in their district had previously been very academically oriented. They asked how number and letter recognition were worked into the curriculum, and the PANDA teacher explained that letter recognition was addressed through nametag

activities, while counting was covered in calendar and attendance activities, as well as at snacktime. The classroom teacher and psychologist were also impressed by the way that the PANDA speech pathologist incorporated her activities into the class routine, rather than functioning as an isolated activity (i.e., the "pull-out" model), and they felt that it was unfortunate that she was not a full-time member of the staff.

The third observer was a professor of child development at a local community college. She was the most critical of the three groups of observers, possibly because as an academician, she is more aware of "what should be" and less in touch with the day-to-day realities of providing service to this population. The professor was extremely impressed with the skills of the PANDA teacher and speech pathologist in facilitating language development, and expressed surprise upon hearing that the speech pathologist was only available 2 days each week, since "they obviously work very well together as a team." She also felt that the activities and teaching techniques were generally developmentally appropriate; however, she had major reservations about student management, the classroom environment and time management.

With respect to student management, she suggested that the use of random-grouping of students was inappropriate, given the wide ranges in the abilities of these students, and she noted that disruptive or otherwise inappropriate behaviors as well as incorrect responses were being reinforced by the classroom aide and student assistant. In response to the writer's observation that the classroom teacher and speech pathologist could not be expected to continually supervise aides and still perform their jobs competently, the professor pointed out that with this population of students, every incorrect reinforcement of an inappropriate behavior or response makes the eventual extinction of the behavior that much more difficult to accomplish. She suggested that the aides receive more training and supervision, and that student groupings be planned in advance to address common needs or goals.

The third observer also expressed concerns about the classroom environment, noting that the room was stuffy and the arrangement of toys and furniture created a "chaotic and cluttered" atmosphere. She was also disappointed by the limited scope of available manipulatives. (When the writer shared this observation with the classroom staff, they pointed out that certain

manipulative toys such as puzzles and modeling clay, as well as the classroom "kitchen," were temporarily put away to make room for objects related to the current unit on transportation.) When asked for suggestions that would improve the environment, the professor suggested that the bulletin boards be lowered to increase their accessibility to small children, that the circle activities be moved to another location (away from the shelves of toys) to decrease distractions, that enough tables and chairs be available to accommodate the entire group comfortably, and that the "housekeeping" center be a permanent fixture in the room.

The professor's biggest area of concern addressed the issue of time management, a concern that was also raised by the initial observer. She suggested that some consideration be given to changing opening circle and snacktime so as to decrease the "rote" nature of these activities, thereby generating more student interest and increased learning. She also felt that far too much time was spent getting organized or moving from one activity to the next, and that "free-play" was only beneficial if it was somehow guided or directed by an adult. To conclude, the professor stated that "given the strengths and talents of your

staff, you could really make phenomenal gains with these children if you just made better use of your time."

In summary, the goals of this practicum focused on two identified areas of need. The primary goal addressed the creation of a philosophy of education and developmental guide that would assist the classroom staff in selecting instructional content and in building a foundation for the creation of an appropriate curriculum for this population. This component was judged to be a "qualified" success, as evidenced by interviews with the classroom staff, the writer's weekly observational log, student progress on the developmental guides and the observations of the independent observers. The term "qualified" is employed, because while the content and techniques employed in the classroom are developmentally appropriate and have contributed significantly to the strength and effectiveness of the program, there continue to be areas of weakness which should be addressed if the program is to fulfill its potential to make significant changes in the lives of these children. The second primary thrust of this practicum, a family intervention component comprised of frequent teacher/parent communications and periodic parent inservices, was also judged to be successful on the basis of parent

interviews and the written surveys completed after each inservice.

Conclusions

Early intervention for children with special needs is a relatively recent phenomena, particularly in the public schools. As a result, most programs are still experimenting with methods and curricula in their efforts to develop programs that will produce maximal progress gains for these children. Research attempts to measure the efficacy of early intervention programs have been characterized by numerous methodological shortcomings, including a disproportionate focus on child-related cognitive outcomes; failure to minimize basic threats to validity (particularly history, testing and maturation); failure to identify independent variables with sufficient specificity; and bias resulting from experimenter failure to utilize blind methods of data collection in the evaluation of their own programs (Shonkoff, Hauser-Cram, Krauss, & Upshur, 1988).

However, despite the flaws inherent in most of the research on early intervention, there is little doubt that such programs can result in significant gains for diverse groups of children with handicaps of varying severities (Bagnato & Neisworth, 1980; Bricker & Dow, 1980; Bricker & Sheehan, 1981; Casto & Mastropieri,

1986; Guralnick & Bricker, 1987). It has also been shown that participation in early intervention programs can result in fewer special education services in later school years (Weiss, 1981). This is particularly important, since the cost of special education is more than twice as expensive as the cost of regular education (Kakalik, Furry, Thomas, & Carney, 1981).

Given that early intervention is an effective means of assisting students with special needs to achieve maximal developmental gains, the issues of methods and curriculums, and the role of the parents in their child's education have become primary considerations in the development of strong early intervention programs. Existing research has consistently documented the importance of family involvement in predicting the success of early intervention programs (Ludlow & Allen, 1979; Revill & Blunden, 1979); however, little research has been done on the effectiveness of different methods or curriculum, and the available studies exhibit the same methodological limitations that were described earlier.

Despite the lack of consensus about specific curricular programs or methods within the existing literature, most researchers agree that handicapped students make the most progress in moderately structured,

teacher-directed, verbal-cognitive programs (Haywood, Brooks, & Burns, 1986; Lazar & Darlington, 1982; Sprigle & Schaefer, 1985). There is also a significant body of research to support the use of incidental teaching techniques to foster language development and generalization of communication skills into unfamiliar settings (Bricker & Carlson, 1981; Halle, Baer, & Spradlin, 1981; Hart & Risley, 1980; Hoff-Ginsberg & Shatz, 1982; Stremel-Campbell & Campbell, 1985; Warren & Kaiser, 1988).

Consequently, it was the writer's decision to work with a curriculum committee in developing a philosophy of education and a developmental guide that would assist the classroom staff in structuring the program and content of instruction to reflect our existing knowledge about "what works." In addition, a parental intervention component emphasizing increased communication and parent inservices was incorporated into the action plan, because the committee agreed that increased parental involvement was critical to the success of the program, and because parent education is mandated by P.L. 99-457.

Action by committee instead of by an individual in projects of this nature is necessarily more time-consuming and expensive; however, using a committee offers many advantages that more than offset the increased cost and

time. For example, the committee was made up of people from a variety of disciplines, which allowed for a merging of strengths. The program director had access to resources (standardized tests and existing curriculums) that were invaluable to the committee in developing the guides, while the classroom teacher contributed her expertise in the areas of motor development and physical handicaps, which were weak areas for the speech/language members of the team. In addition, because the writer was dependent upon the classroom staff to implement her ideas for strengthening the program, the participation and commitment of the classroom teacher was critical to the success of the practicum. (As was noted in Chapter IV, the classroom speech pathologist was inadvertently excluded from the curriculum committee, an oversight that the writer felt had a negative initial impact on the success of the project's implementation.)

The success of the philosophy and developmental guide are generally reflected in the various interviews, the writer's log and the students' pre- and post-measurement progress gains over the course of the year. Staff interviews indicated that the guides were useful in providing an overview of student functioning and a measurement of student progress, while the written observations of the writer indicated that the activities

occurring in the classroom were developmentally appropriate and directly related to the objectives listed in the guide. In addition, although the number of students who achieved total Intervention Efficiency Indexes of 1.0 or above was one student shy of the writer's specified criteria for success, 17 of the 20 students in the program made substantial gains (IEIs of at least 1.0 or above) in at least one of the developmental skill areas.

However, despite these general indications of success, everyone involved in the project agreed that there are problem areas remaining to be addressed. For example, the guide was judged to be too long and unwieldy to be useful on a day-to-day basis. As a result, it was not as helpful in determining program content as it was in providing a general framework that could be used by the classroom staff in selecting more specific instructional content. A related issue that arose in judging the value of the guide concerned the revision of the guide from organization by developmental area to organization by chronological age. While the change in format appeared to provide a better overview of the child's general stage of development, it became somewhat more difficult to assess progress gains made in specific areas, since all of the objectives for each skill area were no longer grouped together.

A look at student progress on the developmental guides over the course of the year also reveals some problems in the use of the guides and in the use of the Intervention Efficiency Index as a measure of program efficacy. Thirteen of the 20 students in the program achieved total IEIs of 1.0 or above, which was below the writer's specified criteria for success. However, a more in-depth analysis of these results revealed that 3 of the 7 students who failed to achieve IEIs of 1.0 or above were physically or multiply handicapped, and thus were severely limited in their potential to progress. Interestingly, these three physically or multiply handicapped students were the only students not to make significant progress in at least one developmental skill area. This finding reinforces our understanding of the relationship between motor development and overall development (see Motor Skills Rationale, Appendix B or E), and suggests that the guide may be most appropriate for students who exhibit delays in one or more of the developmental areas, but who have the potential to function within the normal limits for children their age.

In addition, students who were only mildly delayed in one or more developmental areas tended to achieve lower IEIs than students who were significantly delayed.

It is the writer's contention that the guide presented a false impression of the progress (or lack of progress) made by mildly handicapped students. These students achieved lower IEIs than their more severely delayed counterparts, not because they failed to make progress, but because they did not have as much ground to make up. Consequently, their gains were not as impressive as those made by their more severely delayed classmates. In summary, the developmental guide appeared to be most useful in describing the progress made by those students who were moderately to severely delayed in their acquisition of communication skills, but whose physical and cognitive potentials were reasonably intact.

This observation leads to another problematic issue that the classroom staff will need to address. The district as well as the program's staff is committed to a cross-categorical approach to early intervention, as evidenced by the philosophy that was created and agreed upon by the curriculum committee (Appendix A). However, the performance of the severely physically or multiply handicapped students on the developmental guide suggests that a non-categorical placement may not be the most effective program for these students, since the emphasis of the PANDA program

is clearly on the development of verbal, cognitive and social skills, as evidenced by the visitors' observations, the teacher's lesson plans and the writer's log. The argument for a separate placement for these children is further strengthened by the fact that OT/PT services that might assist these students in their development of some motor control are only available to the PANDA program on a very limited, consultative basis.

This issue has been addressed in the literature by Garwood (1979), who proposed that efforts be made to cluster and service exceptionalities according to degree of severity rather than by etiology. Under his plan, children with moderate exceptionalities would be serviced in separate, mainstreamed classrooms within a regular educational setting, while children with severe or profound handicaps requiring specialized services or strategies would be serviced in special centers where all of the necessary services were available on the premises. While the PANDA staff and curriculum committee continue to feel strongly about the use of the cross-categorical model, some consideration should be given to the question of whether a cross-categorical setting is the most appropriate placement for a severely physically involved student.

The effectiveness of the program was also measured using objective observations by three outside observers. It was gratifying to find out that the observers were uniformly impressed by the quality of the student/ teacher interaction, the developmental nature of the activities and the language facilitation techniques employed within the classroom, since these were primary goals in the implementation of this practicum. It was also interesting to observe that two of the three visitors expressed the need for better time management in the structuring of the class.

However, it is the opinion of the writer that this evaluation technique would be more valuable if one objective observer visited the class three times over the course of the school year, rather than having three different observers see the class on a one-shot basis. Because the observers visited the class only one time, they were unable to identify changes in programming or student functioning that may have occurred during the school year. Also, all students and teachers have "good" and "bad" days, and because the observers only visited the class one time, they had no way of knowing whether what they saw was typical for the program or in some way unusual.

An additional component of this practicum was the implementation of the parent intervention program consisting of increased parent/teacher communication and periodic parent inservices. The informal parent and staff interviews, as well as the written surveys completed following the inservices, indicated that this component was successful for everyone involved. All of the parents interviewed expressed satisfaction with the quantity and quality of parent/teacher communication. An additional unanticipated benefit of the increase in parent/teacher communication was the improved parent/teacher perception of the value of the "home visits." Historically, the classroom teacher visited each student in his home at least once during each school year, to improve her understanding of the child and his family situation and to offer suggestions to the parents that might facilitate their child's development within the home. Apparently, the increased communication between the teacher and her students' parents contributed to a closer relationship, so that parents felt more comfortable sharing their frustrations and concerns, while the classroom teacher spent less time "getting to know" the family, and more time making helpful suggestions about traditionally "sticky" topics such as behavior control and unproductive family dynamics.

Parent and staff feelings about the value of the parent inservices were also uniformly positive. The parents attending the inservices expressed appreciation for the opportunity to improve their understanding of their child's problems, while the staff expressed hope that the training parents received at the inservices would make their jobs easier by making the parents more active partners in their child's development. The staff did express disappointment that the attendance at the second inservice was so small, feeling that the material presented about behavior control was very important information that most of their students' parents would have benefitted from hearing. In discussing the differences in attendance between the first and second inservice, they concluded that the morning session was better attended because childcare was provided, and because parents were used to being out during the day and were less likely to be tired or to want to be at home with their families. Also, some of the parents in the program did not own a car and may not have felt comfortable using public transportation in the evening. The offer of free childcare was felt to be an especially important drawing card, since some of the families participating in the program were single-parent families in a lower socio-economic bracket.

An additional staff concern that arose from our discussions about the parent inservices was the issue of follow-up, either in the form of periodic hand-outs about the issues addressed in the meeting, dissemination of inservice materials to parents who were unable to attend, or ongoing training through classroom observation or through the home visits. Since parental involvement in the educational program of these students is so important to their ultimate success, it was the feeling of the PANDA staff that parent involvement should be an ongoing process. Unfortunately, the staff is not compensated for the personal time and energy that they commit to this type of supplementary parent program, and the district does not have the available monies to reimburse the staff for their additional efforts. This is an issue that should be addressed when the staff plans for the future, as it is possible that funding for parent programs might be available from other sources.

The results of this project offer a number of implications for the future activities of the writer. First, since the developmental guides were judged to provide good overviews of developmental status and student progress, but were not helpful in determining content on a day-to-day basis, the next logical step

would be for the writer to incorporate the goals on the developmental guides into the teacher's everyday lessons. The classroom staff has opted to present their content in the form of thematic units; therefore, the writer will analyze the thematic units and the class activities to determine the developmental areas and specific objectives that are being addressed, and will develop additional activities to address those areas in the developmental guides that have received less attention over the course of the school year.

Second, it is clear to the writer as well as the classroom staff that the use of incidental teaching techniques is an effective means of facilitating communication development in this population. Furthermore, the writer's observations as well as the observations of the independent observers indicated that the classroom teacher and speech pathologist were very adept at using these techniques in the classroom. Unfortunately, one of the independent observers noted that these techniques were not being used correctly by the classroom aide or student assistant, an observation that was supported by the classroom staff. To address this problem, the writer will develop a training program to assist the program's support staff in using these techniques appropriately with the

students enrolled in the program. Such a training program might incorporate observations of the classroom videotapes with modeling and role-playing, followed by supervised observations of student/support staff interactions.

The results of this practicum suggest that parents (as well as children) benefit from participation in their child's educational program, and that they appreciate any information or inservicing that assists them in dealing with their child. Since many parents expressed interest in topics on the initial survey that were not addressed in the first two inservices, the writer will research information on these topics, and will generate hand-outs for parents that will address their concerns in these areas. Among the topics in which parents expressed an interest were "The Hows and Whys of Playing with Your Child," "Places to Go/Things to Do in _____," "Child Advocacy--Your Legal Rights," and "Dental Hygiene and Nutrition."

Finally, the writer's participation in the preschool classroom over the course of the school year has convinced her of the value of early intervention, and of the need for a significant increase in funding at the federal as well as the state level. Furthermore, the provisions of P.L. 99-457 require the various

federal, state, local and private agencies that provide services to this population to work together more efficiently and cooperatively, particularly with respect to fiscal responsibility, personnel resources, monitoring and evaluation, and paperwork and data collection (Smith & Strain, 1988). Consequently, the writer will continue to lobby her state and federal legislators for increased funding as well as better coordination of existing services. Success in either arena will substantially improve the quality of services available to these children.

Recommendations

The writer has several recommendations based on the results of her work in PANDA classroom this year. Her initial recommendations address the political realities of doing educational projects in which a number of people will be involved. First, all people who will be involved in the implementation of a project should be involved from the beginning. The inadvertent exclusion of the classroom speech pathologist from the planning process that occurred during the summer of 1988 meant that she had to be brought up to date and her support and commitment solicited "after the fact," a complication that could

have been eliminated had she been included from the beginning. Also, the writer suggests that anyone desiring to undertake an educational project in a public school district be very thorough in investigating the district's requirements and procedures prior to beginning his/her project. The writer's failure to do this resulted in some sleepless nights and political back-pedalling that could have been avoided if she had been less naive about the functioning of her district's administration.

With respect to programming, the writer suggests that serious consideration be given to how classroom time is used. It is obvious from the observations of the writer and the independent observers that the interactions between students and teachers are invaluable in facilitating child development, and that an enormous amount of progress can be made in a very limited amount of available class time (approximately 10 hours each week). However, greater progress can be made if the class is sufficiently structured and organized to take advantage of every moment that the students are present. Even free play periods can be guided or structured in order to promote development in a particular skill area, and transitioning between activities should be accomplished in a manner that

minimizes the disruption and results in the least possible amount of lost class time.

An additional programming consideration concerns the selection of activities, all of which should be related to the thematic unit being studied. A major premise of thematic programming is that immersion in a subject facilitates retention of the material presented, particularly for students exhibiting delays in the area of language and/or cognition. Consequently, the writer suggests that during the presentation of a thematic unit, great care to be taken to insure that all classroom activities are somehow related to the subject being studied.

As was discussed previously in this chapter, the performance of those students with physical or multiple handicaps on the developmental guide indicated that they had not made significant gains in any of the targeted developmental areas. Presumably, these students' functioning on standardized tests would be even lower, since the guide is an ongoing, observation-based instrument, while standardized tests use a structured question/answer format during a specified "test" period. As a result, there is some question in the writer's mind as to whether placement in a program for children with developmental needs is the

most appropriate setting for these students. The writer recommends that service providers give serious consideration to the types of delays or disorders that they are most effectively able to ameliorate, and that they be very cautious about taking on students whose needs may be better met in an alternative setting.

In addition, the writer suggests that parent education be an integral part of any early intervention program, and that such programs include not only parent inservices, but also classroom observations, home visits and ongoing communication with the program staff. Parents are a child's primary teachers. With adequate support and training, they can contribute significantly to their child's growth and development.

The majority of students who receive early intervention services exhibit primary handicapping conditions in the area of language and/or cognition. In fact, 80% of the students enrolled in this particular preschool program were identified as speech/language handicapped. If this trend continues, it seems logical that the development of communication skills will continue to be a primary focus of early intervention programs. The writer therefore recommends that the speech/language pathologist be a full-time member of the intervention team, as her expertise in this area

contributes greatly to the development of communication skills in children with moderate to severe delays in speech/language development.

Finally, the writer recommends that professionals desiring to undertake educational projects in a work setting that is not their own thoroughly investigate the feasibility of such a project prior to its implementation. This writer enjoyed tremendous cooperation and support from the program staff with which she worked, and she gained a tremendous appreciation for their expertise. However, even with the considerable support and cooperation that she received from the program's personnel, she still felt constrained in making suggestions for improvements because it was not her classroom, and she lacked the necessary authority. This can be very frustrating for those who are used to being in control and making changes as the need arises; consequently, professionals desiring to pursue a project in a setting that is not their own should determine ahead of time whether or not they will be able to successfully pursue their goals within this framework.

Early intervention is an efficient and cost-effective way to meet the needs of young, developmentally delayed children. Moderately structured, teacher-directed

programs emphasizing the development of verbal/cognitive skills through the use of incidental teaching techniques have been very successful in helping children to make substantial developmental gains prior to their enrollment in regular education settings. However, most of these programs are still in their infancy, and further research should focus not only on content and techniques, but also on issues such as family involvement, integration with non-handicapped students, teacher preparation, financing and the development of program quality standards. These children deserve the highest quality of services possible--continued attention to these issues will insure that they receive them.

Dissemination

The results of this practicum were shared in a number of ways. First, the writer shared the results of the practicum with the PANDA classroom staff and participated in an informal discussion of the student data sheets and their possible implications for the program. It was particularly gratifying for the writer to return to the classroom several weeks later and observe programming changes that resulted in more effective and efficient use of class time.

The writer then submitted the practicum report to the director of the PANDA program and to the chairperson of the speech/language department, and agreed to make herself available to discuss the results at their convenience. Finally, the results of this practicum were submitted to the district's Director of Research and Evaluation, in accordance with district guidelines regulating educational research.

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APPENDIX A

PHILOSOPHY OF EDUCATION

Goal Statement

It is the goal of this committee to create, construct and devise a comprehensive developmental guide for use in the preschool classroom serving 3- and 4-year-old students with special needs.

This guide will assist teachers in creating a child centered environment that will facilitate the acquisition of essential skills and maximize the learning potential of these students. It will also serve as a foundation for the development of a comprehensive core curriculum. The areas to be addressed in the developmental guide include: motor skills, cognition/language development, self-help skills and social/emotional development.

Rationale/Belief Statement

It is the belief of this committee that early intervention efforts are critical in enabling handicapped students to fulfill their academic potential, and that direct interaction with teachers, peers and materials in a moderately structured, stimulating environment is the most effective way to promote learning. To this end, we support a child-centered, cross-categorical approach that will allow students at different stages of development to interact freely,

serving as teachers or models in their areas of strength, and learning informally from students with more advanced skills in other areas.

We view the teacher as both facilitator and guide, whose primary responsibilities are to structure opportunities for children to actively engage in learning, and then to assist the students in using the available opportunities to acquire needed competencies. It is also the responsibility of the teacher to provide support and instruction to the child's family, thus ensuring that the student's learning process continues outside of the immediate classroom environment.

We also acknowledge the importance of self-expression in the process of learning, and feel that the development of communication skills in whatever form possible should be a primary goal of early intervention programs. Furthermore, it is our belief that the family is the primary learning source for each student. As such, it should have an active role in the intervention process, both in the development of the Individual Education Plan and in the creation and implementation of techniques that will facilitate each child's growth and development. To this end, we support the use of incidental teaching techniques as a way to foster communicative development

across a variety of environments and with a number of different caregivers.

In summary, we view the education of children as a team process requiring the expertise of family and professionals in providing and structuring opportunities for active engagement with the environment. It is our hope that by providing and guiding these interactions, we can facilitate optimal progress in all areas, and can assist our students in fulfilling their individual potentials.

APPENDIX B

ORIGINAL DEVELOPMENTAL GUIDE ORGANIZED BY SKILL AREAS

Motor Skills Rationale

The development of volitional movement may be viewed as the foundation of development in all other areas. Balance, stability, coordination of both sides of the body, rotational abilities, a broad range of motion, adequate muscle tone and strength, and the volitional control of these movements enable the child to interact actively with his environment. Since the child learns primarily by acting on his environment, motor problems limiting the ability to move and to manipulate objects may slow cognitive development by reducing learning opportunities. It is also likely that the motorically involved child will have difficulty demonstrating the cognitive skills of which he is capable.

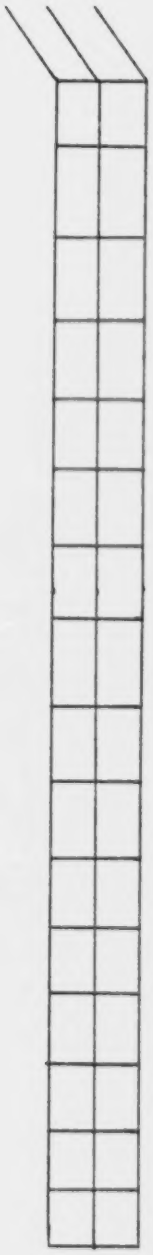
In a similar fashion, motor problems involving control of the head, trunk or oral musculature can inhibit the development of oral speech. Limited interaction with the environment may also result in the formation of fewer concepts, thus slowing both comprehension and expressive language development, particularly with respect to spatial concepts and actions. Motoric problems may also isolate children from social interactions with peers and adults, thus restricting opportunities to practice and expand their emerging communicative skills.

Self-help and social-emotional skill areas are also affected by delays or disorders in motor development. Inadequate head or trunk control, stability and equilibrium problems may hinder the development of feeding, dressing and toileting skills. The physically handicapped child may also have difficulty encouraging reciprocal positive interaction with the primary caregiver, thus putting himself at greater risk for attachment failure (Foley, 1980). In addition, the student's self-concept and social interaction skills may suffer as he/she becomes increasingly aware of his/her physical inadequacies.

It is apparent that the motor skills area is a critical component of a preschool early intervention program. The following skills are divided into gross and fine motor areas and sequenced developmentally to guide the teacher in assessing the student's level of development and in selecting age-appropriate motoric objectives for use in the classroom.

Gross Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING



LOCOMOTOR SKILLS:

1-rolling from prone to supine position (4 mos.)

2-rolling from supine to prone position (4 mos.)

3-rolling continuously (5 mos.)

4-crawling backwards (6 mos.)

5-crawling forwards (8 mos.)

6-assumes the creeping position (7 mos.)

7-creeps forward (8 mos.)

8-pulls body to a standing position (9 mos.)

9-cruises around furniture (10 mos.)

10-walks holding a supporting hand (11 mos.)

11-walks with hands extended (12 mos.)

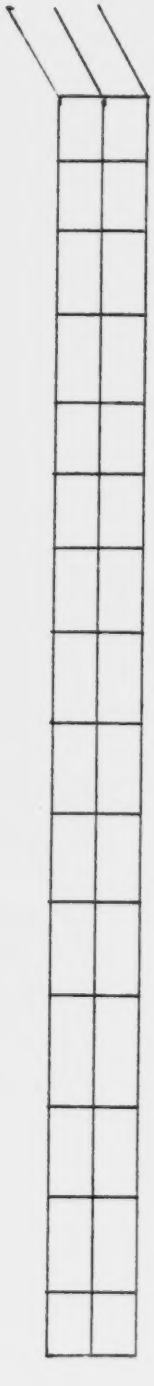
12-walks with arms swinging (14 mos.)

13-walks and steps over an obstacle (22 mos.)

14-walks quickly (22 mos.)

15-walks backwards (24 mos.)

16-walks with heel-toe gait (36 mos.)



17-runs stiffly with occasional falls (12 mos.)

18-runs quickly without falling (24 mos.)

19-runs smoothly with changes in speed/ direction (36 mos.)

20-creeps upstairs (12 mos.)

21-creeps backwards downstairs (14 mos.)

22-bumps forwards on bottom downstairs (18 mos.)

23-walks up/down stairs with hand held, two feet per step (21 mos.)

24-walks up/down stairs using railing, two feet per step (22 mos.)

25-walks up/down stairs using railing, alternating feet (44 mos.)

26-walks up/down stairs with hand held, alternating feet (30 mos.)

27-walks up/down stairs without assistance (60 mos.)

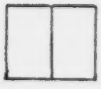
28-jumps one time off floor with both feet (24 mos.)

29-jumps repeatedly using both feet (30 mos.)

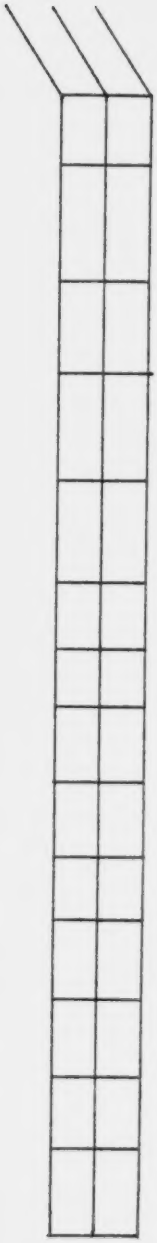
30-hops on preferred foot (36 mos.)

31-hops on other foot (38 mos.)

THE STUDENT EXHIBITS THE FOLLOWING POSTURE/ BODY MECHANICS SKILLS:



32-exhibits head control while in prone position (1 mo.)



33-bears weight while in prone position (3 mos.)

34-exhibits head control while in supine position (4 mos.)

35-brings arms to midline while in supine position (5 mos.)

36-lifts legs off ground while in supine position (6 mos.)

37-exhibits head control while sitting (3 mos.)

38-sits with support (4 mos.)

39-sits without support (7 mos.)

40-independently assumes sitting position (8 mos.)

41-stands with support (7 mos.)

42-stands without support (10 mos.)

43-independently assumes standing position (10 mos.)

44-stoops then resumes standing position (18 mos.)

45-stands on one foot with support (18 mos.)

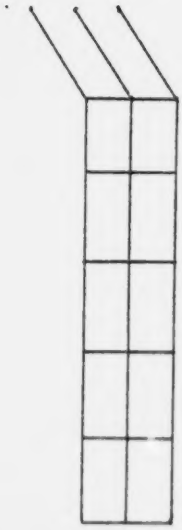
46-stands on one foot without support (36 mos.)

Fine Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING EYE-HAND COORDINATION SKILLS:

47-visually tracks own hand (2 mos.)

48-shakes or examines object placed in hand (3 mos.)



49-looks/reaches for an object with one hand (3 mos.)

50-looks/reaches for an object with two hands (4 mos.)

51-grasps an object within reach with two hands (4 mos.)

52-grasps an object within reach with one hand (5 mos.)

53-reaches for an object while holding another (5 mos.)

THE STUDENT EXHIBITS THE FOLLOWING GRASP/ PREHENSION SKILLS:

54-grasps an object placed in hand (1 mo.)

55-releases an object placed in hand (3 mos.)

56-demonstrates palmar grasp (3 mos.)

57-demonstrates radial palmar grasp (5 mos.)

58-pokes/examines objects (6 mos.)

59-demonstrates neat pincer grasp (10 mos.)

THE STUDENT EXHIBITS THE FOLLOWING MANIPULATIVE SKILLS:

60-builds a tower of five blocks (24 mos.)

Solves Puzzles

61-simple insets (24 mos.)

62-non-inset (36 mos.)

Demonstrates Pre-Handwriting Skills

63-grasps crayon in fist and scribbles (14 mos.)

64-does purposeful scribbling (18 mos.)

65-scribbles but stays on paper (24 mos.)

66-holds crayon with fingers (not fisted) (30 mos.)

67-imitates circular, vertical and horizontal lines (36 mos.)

68-copies circular, vertical and horizontal lines (48 mos.)

69-nests objects (24 mos.)

Operates Knobs

70-toy knobs (26 mos.)

71-door knobs (28 mos.)

72-unscrews lids on jars (30 mos.)

73-screws lid onto jar (32 mos.)

Handles Clay

74-manipulates clay (24 mos.)

75-pounds clay (27 mos.)

76-squeezes clay (30 mos.)

77-pulls clay apart (33 mos.)

78-rolls clay (36 mos.)

79-makes balls with clay (44 mos.)

80-makes crude, unrecognizable objects with clay (48 mos.)

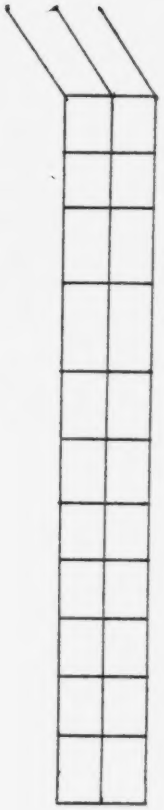
Paints with Brush

81-uses whole arm strokes (18 mos.)

82-uses wrist strokes (24 mos.)

83-emphasizes process over product (28 mos.)

84-paints vertical, horizontal and circular lines (32 mos.)



85-names painted picture (36 mos.)

86-paints recognizable object (48 mos.)

87-emphasizes end product over process (54 mos.)

Uses Scissors

88-holds scissors correctly (24 mos.)

89-opens and closes scissors (27 mos.)

90-makes small cuts in paper (30 mos.)

91-holds paper while cutting (33 mos.)

92-cuts in a straight line (36 mos.)

93-cuts in a curved line (42 mos.)

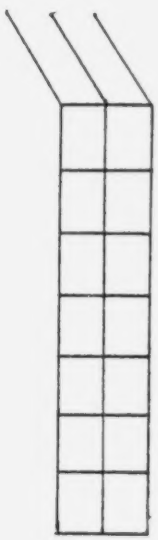
94-cuts a triangle (48 mos.)

95-cuts while moving paper (54 mos.)

Self-Help Skills Rationale

Like motor skill development, the development of adequate self-help skills (within the context of existing physical limitations) enables the student to develop a sense of independence and mastery of his body. Competence in self-help areas strengthens self-concept and provides a foundation for future learning by showing the child that he is capable and in control of his body and environment, thus freeing the teacher to focus on other skill areas. Self-help skills in this guide are divided into feeding, dressing, toileting and handwashing areas, and are sequenced developmentally to facilitate assessment and selection of learning objectives.

Feeding Skills



THE STUDENT EXHIBITS THE FOLLOWING FEEDING SKILLS:

96-coordinates sucking, swallowing and breathing while eating (1 mo.)

97-chews using a munching pattern (5 mos.)

98-takes bites from a cracker (7 mos.)

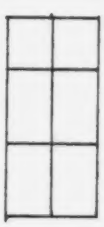
99-feeds self with fingers (11 mos.)

100-feeds self with spoon (14 mos.)

101-scoops food with spoon (22 mos.)

102-chews using a rotary action (30 mos.)

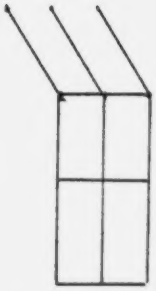
THE STUDENT EXHIBITS THE FOLLOWING DRINKING SKILLS:



103-drinks from cup held by adult (10 mos.)

104-drinks from cup held in both hands (12 mos.)

105-sucks from a straw (23 mos.)

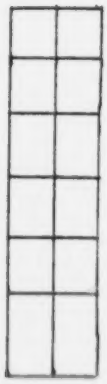


106-drinks from cup held in one hand (24 mos.)

107-returns cup to table without spilling (36 mos.)

Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING UNDRESSING SKILLS:



108-cooperates passively (10 mos.)

109-helps with undressing (12 mos.)

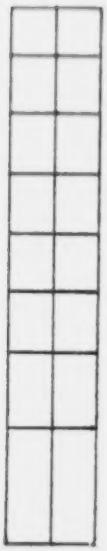
110-removes shoes independently (18 mos.)

111-removes socks independently (20 mos.)

112-removes coat independently (24 mos.)

113-removes "pull-down" garments for toileting purposes (30 mos.)

THE STUDENT EXHIBITS THE FOLLOWING DRESSING SKILLS:



114-cooperates passively (12 mos.)

115-assists with dressing (12 mos.)

116-puts shoes on independently (36 mos.)

117-puts coat on independently (39 mos.)

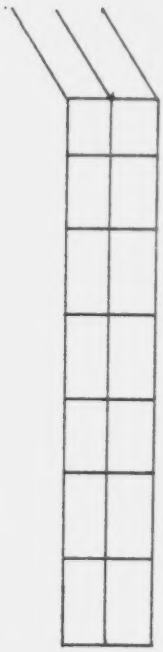
118-puts socks on independently (48 mos.)

119-puts on "pull-on" garment (50 mos.)

120-knows which shoe goes on which foot (54 mos.)

121-manages fasteners including zippers, buttons, laces, buckles or snaps (60 mos.)

Toileting Skills



THE STUDENT EXHIBITS THE FOLLOWING

TOILETING SKILLS:

122-indicates wet or soiled pants (12 mos.)

123-sits on toilet without resistance (18 mos.)

124-urinates in toilet with assistance (18 mos.)

125-defecates in toilet with assistance (22 mos.)

126-communicates need to toilet (24 mos.)

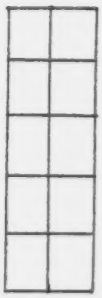
127-toilets independently except for wiping (48 mos.)

128-toilets independently including wiping and handwashing (60 mos.)

Handwashing Skills

THE STUDENT EXHIBITS THE FOLLOWING

HANDWASHING SKILLS:



129-cooperates in handwashing (12 mos.)

130-washes hands with assistance (18 mos.)

131-dries hands with assistance (18 mos.)

132-washes hands independently (24 mos.)

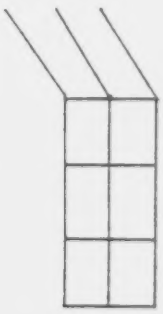
133-dries hands independently (24 mos.)

Cognition/Language Skills Rationale

Although experts disagree on the nature of the relationship between language and cognition, the interdependence of the two areas in undeniable. Language is the primary means by which one demonstrates understanding of concepts, processes and events; consequently, when a child's communication skills are inadequate, progress in motor, cognitive, self-help and social-emotional areas are also impacted. In a similar fashion, delays in the acquisition of cognitive skills affect the rate, quality and quantity of language acquisition. A student with cognitive delays may have difficulty understanding higher level symbol representation and abstract concepts, and may be slow to acquire the morphologic and syntactic rules of language. Consequently, the importance of functional cognitive/language skills in the daily life of the handicapped preschooler cannot be underestimated.

Communication facilitates interaction with peers, teachers and family members, and may be a primary means of interaction with the environment for motorically involved students. Piaget's observations of young children indicate that learning occurs primarily when the young child is acting upon his environment (Fischer & Lazerson, 1984). It is therefore critically important that an early intervention program for handicapped students emphasize the development of cognition and language skills, not as isolated skill areas, but as a uniquely inter-related unit. The following cognition/language skills are divided into non-verbal, receptive and expressive areas, and are sequenced developmentally to facilitate assessment and selection of learning objectives.

Non-Verbal Skills



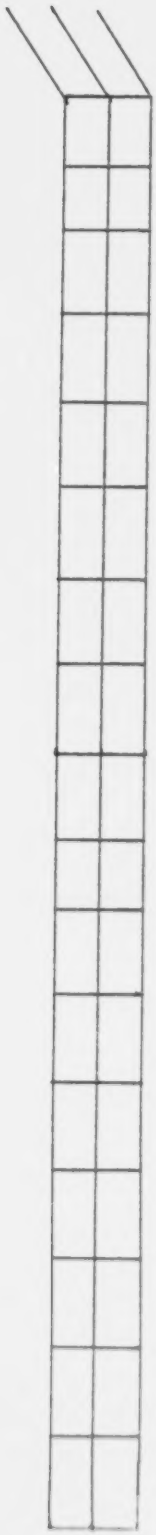
THE STUDENT EXHIBITS THE FOLLOWING

NON-VERBAL SKILLS:

134-responds to environmental sounds (1 mo.)

135-responds to human voice (2 mos.)

136-localizes to sound (3 mos.)



137-visually focuses on object/person (4 mos.)

138-visually tracks object/person (4 mos.)

139-establishes, returns and maintains eye contact (4 mos.)

140-responds to speech by looking directly into speaker's face (4 mos.)

141-demonstrates awareness of object permanence (5 mos.)

Demonstrates Means-End Causality by:

142-using tools to acquire objects (5 mos.)

143-using behavior to manipulate others (5 mos.)

144-manipulating an object/toy to achieve a desired response (6 mos.)

145-motorically imitates peers/adults (8 mos.)

146-greets nonverbally (11 mos.)

147-responds to verbal commands with gestures (11 mos.)

148-inhibits action in response to "no" (11 mos.)

149-indicates choice when presented with options (14 mos.)

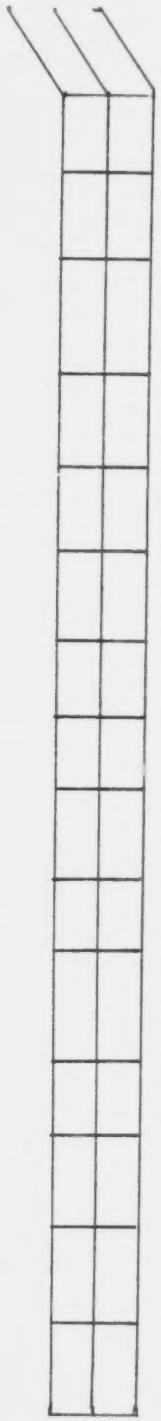
150-communicates basic needs/wants nonverbally (15 mos.)

151-establishes and maintains physical proximity (18 mos.)

152-establishes/maintains turn-taking activities (36 mos.)

153-exhibits appropriate and symbolic play (48 mos.)

Receptive Language



THE STUDENT EXHIBITS THE FOLLOWING

RECEPTIVE SKILLS:

154-looks at familiar people when named (11 mos.)

155-points to common objects when named (12 mos.)

156-understands the concepts of "hot" and "cold" (15 mos.)

157-understands simple questions ("Do you want a bottle?") (17 mos.)

158-points to eyes, ears, nose and mouth when named (18 mos.)

159-responds to simple directional commands ("Come here") (18 mos.)

160-matches objects to pictures (19 mos.)

161-points to pictures of common objects when named (20 mos.)

162-responds to location commands involving objects ("Take it outside") (23 mos.)

163-matches identical colors (24 mos.)

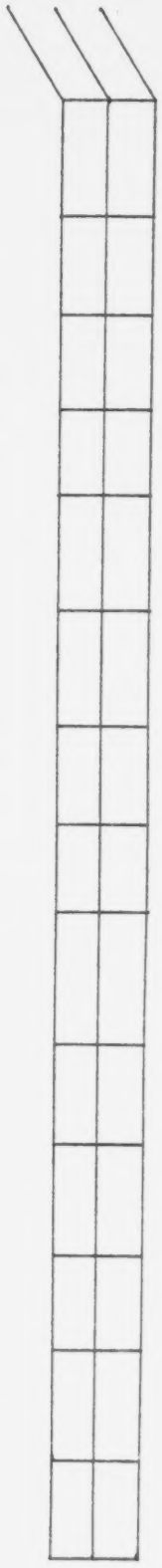
164-comprehends three word phrases (agent-action-object) (25 mos.)

165-comprehends concept of "more" (26 mos.)

166-identifies objects/pictures by function ("What do you ride in?, "What do you sleep on?") (28 mos.)

167-points to pictures of 2 word phrases (agent + action) (30 mos.)

168-comprehends concepts of "one" and "just one" (30 mos.)



169-responds to prepositional location commands involving objects ("on," "under," "in," "behind," "in front") (31 mos.)

170-comprehends possessive pronouns ("my," "your") (33 mos.)

171-understands "big," "little," "short," "long" (34 mos.)

172-points to color when named (red, blue, yellow) (36 mos.)

173-identifies pictures of related actions ("kicking," "running," "walking," "jumping") (36 mos.)

174-understands concepts of "soft," "hard," "rough," "smooth" (40 mos.)

175-likes to follow along in a book being read aloud (41 mos.)

176-matches identical shapes (circle, square, triangle, rectangle) (42 mos.)

177-responds to commands involving two unrelated actions ("Put your shoes in the closet and bring the book to Mommy") (42 mos.)

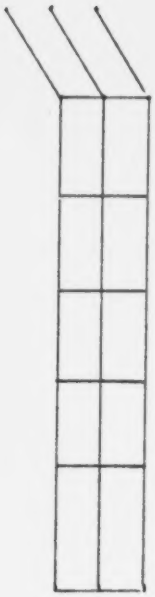
178-comprehends personal pronouns ("he," "they," "her," "me") (46 mos.)

179-sorts objects into two/three categories (animals, food, furniture) (48 mos.)

180-points to color when named (orange, green, purple) (48 mos.)

181-demonstrates understanding of IS and IS NOT (52 mos.)

182-identifies SAME and DIFFERENT using objects (53 mos.)



183-understands the concepts of "heavy," "light," "loud," "soft," "like," "unlike" (54 mos.)

184-points to circle, square, triangle and rectangle when named (57 mos.)

185-sorts pictures into two/three categories (60 mos.)

186-identifies present, past and future tense actions in pictures (60 mos.)

187-identifies comparative adjectives ("bigger," "biggest," "longer," "longest") (60 mos.)

Expressive Skills

THE STUDENT EXHIBITS THE FOLLOWING EXPRESSIVE SKILLS:

188-imitates speech sounds (7 mos.)

189-imitates non-speech sounds (9 mos.)

190-imitates words (13 mos.)

191-labels common objects (15 mos.)

192-expresses basic wants/needs with one word (18 mos.)

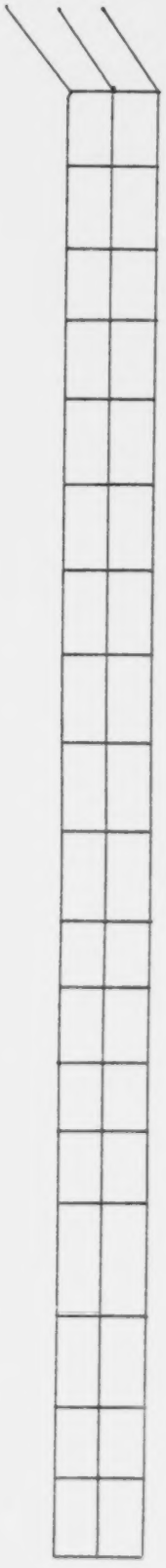
193-labels body parts ("nose," "eyes," "ears") (19 mos.)

194-expresses non-existence ("all gone") (20 mos.)

195-expresses affirmation/rejection (22 mos.)

196-indicates desire for recurrence of object/action ("more," "again") (23 mos.)

197-uses first name to refer to self (24 mos.)



198-labels objects/clothing/people in pictures (25 mos.)

199-expresses action/object using two words ("throw ball") (25 mos.)

200-labels actions in pictures (26 mos.)

201-expresses adjective/object ("pretty mommy") (26 mos.)

202-asks simple questions ("where daddy?") (26 mos.)

203-expresses locations/prepositions involving objects ("in," "on") (27 mos.)

204-describes objects according to their function (27 mos.)

205-answers questions using two or more words (28 mos.)

206-names color adjectives ("red," "blue," "yellow") (30 mos.)

207-responds to "WHERE" and "WHAT" questions (32 mos.)

208-labels actions ("go," "sleep") (34 mos.)

209-uses plural forms with occasional errors (35 mos.)

210-speaks in simple sentences (36 mos.)

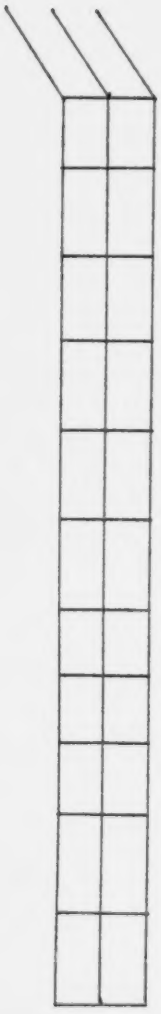
211-expresses information about self (36 mos.)

212-names size adjectives ("big," "little") (37 mos.)

213-responds to "WHO" and "WHY" questions (39 mos.)

214-recites simple nursery rhymes (43 mos.)

215-recalls information from stories (48 mos.)



216-counts out a specific quantity (1, 2, 3, 4, 5) (49 mos.)

217-describes how simple objects are used (50 mos.)

218-tells the function of an object (52 mos.)

219-expresses greetings and polite social forms (54 mos.)

220-takes part in reading aloud by filling in words and phrases (55 mos.)

221-tells what one does when hungry, thirsty or tired (57 mos.)

222-requests help or clarification (58 mos.)

223-names simple opposites (59 mos.)

224-names shapes ("circle," "square," "triangle") (60 mos.)

225-categorizes verbally by form, color and use (60 mos.)

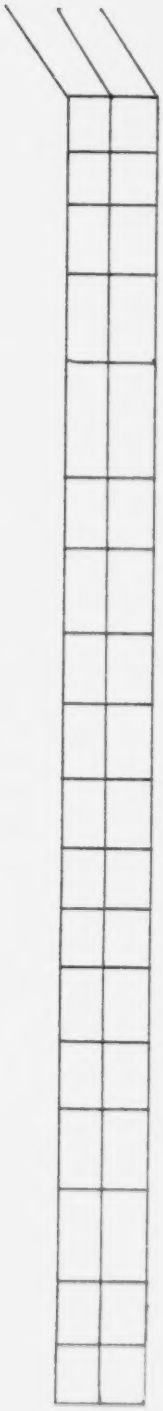
226-initiates conversation and maintains a topic (60 mos.)

Social/Emotional Skills Rationale

The development of social relationships is an important component of a preschool program, closely related to the development of cognitive, motor, communication and self-help skills. Historically, social/emotional theorists have concerned themselves primarily with the elimination of maladaptive behaviors, as opposed to nurturing the development of pro-social sequences. However, it is becoming increasingly evident that delays or deviations in emotional development may have compounding effects on the acquisition of skills in other areas. The child who is passive or withdrawn may have fewer opportunities to learn by interacting with his environment, thus impacting his acquisition of language and cognitive skills. The student who behaves impulsively and has a short attention span may have difficulty planning sequences of movement and may rely on ineffectual problem solving approaches that can slow academic programs. His inability to see another's point of view may be reflected in an inflexible approach to attaining desired goals. Emotional problems or delays may also be evidenced by overdependence on adults, resulting in diminished self-confidence, risk-taking or exploratory behaviors.

The significance of attachment, separation and individuation skills is becoming increasingly apparent to professionals working with young handicapped children (Foley, 1980). In addition, the relationship of play behaviors to the development of social and emotional, cognitive, communication and motor skills is recognized as particularly important for handicapped children (Garvey, 1977). The following social/emotional objectives focus on developmental precursors to healthy emotional development and appropriate social interactions. The goal of the teacher is not necessarily to "train" or "teach" these skills; but rather to raise the level of awareness in the family and school team about the social impact of the lack of these behaviors, and to provide opportunities for pleasurable interaction that will facilitate their development.

Social/Emotional Skills



THE STUDENT EXHIBITS THE FOLLOWING SOCIAL/EMOTIONAL SKILLS:

227-is aware of people (1 mo.)

228-responds to human faces (2 mos.)

229-shows a desire for personal attention (3 mos.)

230-prefers human faces over other visual stimuli (4 mos.)

231-participates in "adult-child dialogue" via mutual gaze, joint action and babbling (4 mos.)

232-shows pleasure in frolic play (5 mos.)

233-discriminates familiar from unfamiliar persons (5 mos.)

234-waves "bye-bye" (9 mos.)

235-offers object to adult without releasing (9 mos.)

236-responds to name (10 mos.)

237-responds to "no-no" (11 mos.)

238-identifies self in mirror (11 mos.)

239-offers and releases toy to adult (12 mos.)

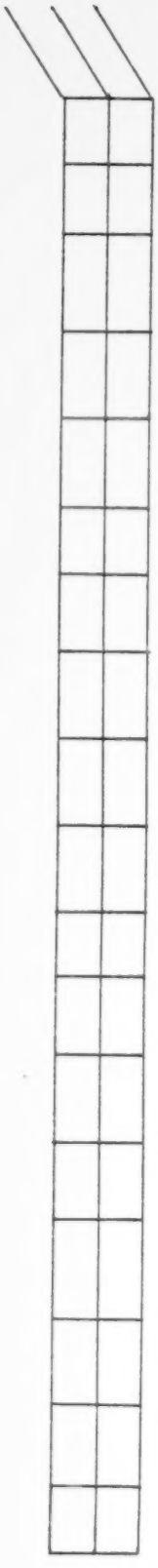
240-expresses emotions (12 mos.)

241-demonstrates affection (14 mos.)

242-is jealous of attention given to others (20 mos.)

243-explores new places (22 mos.)

244-puts toys away upon request (23 mos.)



245-engages in simple make-believe (24 mos.)

246-shows pride in achievements (24 mos.)

247-chooses and plays with toys independently (25 mos.)

248-participates in parallel play (25 mos.)

249-responds appropriately to questions involving choices (26 mos.)

250-enjoys helping (26 mos.)

251-imitates activities of daily living (27 mos.)

252-participates in simple group games/ activities (27 mos.)

253-greets familiar adults spontaneously (28 mos.)

254-plays and handles toys non-destructively (30 mos.)

255-avoids simple hazards (33 mos.)

256-demonstrates some turn-taking (34 mos.)

257-demonstrates awareness of consequences (35 mos.)

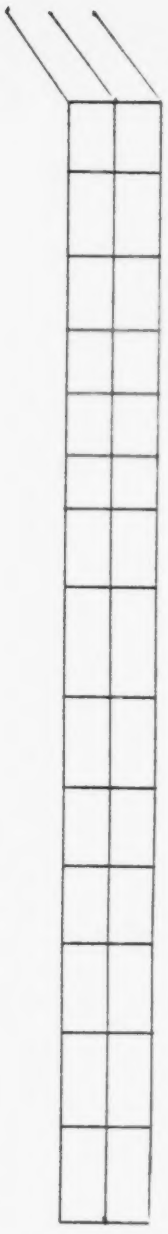
258-shares property with others (36 mos.)

259-calls attention to own performance (38 mos.)

260-expresses enthusiasm for work or play (39 mos.)

261-enjoys floor play with building or wheeled toys (41 mos.)

262-knows first, last names (42 mos.)



263-attends to task in a group for up to 20 minutes (44 mos.)

264-shows an interest in the conversation of others (45 mos.)

265-separates from mother easily (46 mos.)

266-plays cooperatively (46 mos.)

267-shows sympathy towards others (47 mos.)

268-has special friends (48 mos.)

269-recognizes facial expressions of primary emotions (48 mos.)

270-asserts self in socially acceptable ways (50 mos.)

271-engages in adult role play and imitation (50 mos.)

272-complies with adult directives (52 mos.)

273-recognizes another's need for help and offers assistance (53 mos.)

274-uses social terminology appropriately (54 mos.)

275-respects property and rights of others (60 mos.)

276-asks permission to use another's possessions (60 mos.)

APPENDIX C

INITIAL PARENT SURVEY AND INSERVICE SURVEY

September 20, 1988

Dear Parents:

Welcome to the PANDA program! We are looking forward to an outstanding year, and hope that you share our enthusiasm! Our goal this year is to encourage our families to be more actively involved in their child's educational program. As a part of this goal, _____ and I will try to communicate with you as frequently as we can about the problems or successes that your child is experiencing in class. In return, we hope that you will feel free to make suggestions that might help us to work more effectively with your child.

As a second part of our goal, we would like to form a parent support group that will give you the opportunity to talk with other parents of children with special needs, to hear from guest speakers on topics of your choice and to view videotapes of your child's progress in class. We would like these meetings to be convenient to attend and as useful as possible, so please do us the favor of completing the enclosed survey and returning it to us by the 30th of September.

Thank you!

_____, _____, and _____

PARENT SUPPORT GROUP SURVEY

1. I would prefer to attend meetings in the: (circle one)

   MORNING AFTERNOON EVENING

2. I would prefer to attend meetings on: (circle one)

   MONDAYS TUESDAYS WEDNESDAYS THURSDAYS FRIDAYS

3. I would be most interested in learning about: (circle four)

   A. COMMUNITY SERVICES FOR HANDICAPPED CHILDREN AND FAMILIES

   B. THE HOWS AND WHYS OF PLAYING WITH YOUR CHILD (Playdoh is more than flour, water and salt...)

   C. DENTAL HYGIENE AND NUTRITION

   D. BEHAVIOR CONTROL (Be your own boss!)

   E. PLACES TO GO/THINGS TO DO IN _____

   F. PARENTING SKILLS (If I'm doing everything right, why do I feel like a failure?)

   G. CHILD ADVOCACY--YOUR LEGAL RIGHTS

   H. RESPITE CARE (You can't be good to somebody else if you aren't good to yourself!)

   I. EXPANDING YOUR CHILD'S LANGUAGE/COMMUNICATION SKILLS

   J. OTHER _____

Please return this survey to the PANDA program by September 30th.

PARENT WORKSHOP SURVEY

Session # _____ Topic _____

Please rate the various activities of this meeting according to how useful they were to you. (1 = not at all useful, 5 = very valuable)

Pre-lecture socializing with parents/teachers:

1 2 3 4 5

The speaker's presentation:

1 2 3 4 5

The videotaped class session:

1 2 3 4 5

The question/answer period following the presentation:

1 2 3 4 5

Comments:

THANK YOU!

APPENDIX D

INCIDENTAL TEACHING TECHNIQUES

Incidental teaching for language intervention should be used within the following structural framework:

1. The environment must be arranged so as to increase the likelihood that the child will initiate speech to the adult and will thus provide incidences for teaching.

2. The language targets for each student should be pre-selected and appropriate to his skill level and interest, and to the environment.

3. The adult should respond to the child's initiations by requesting elaborated language that resembles the targeted forms.

4. The adult should reinforce the child's communicative attempts and his use of specific forms with attention and access to the objects, actions or events in which the child has expressed an interest (Hart, 1985).

Incidental teaching episodes are brief, positive and oriented toward communication. In each teaching episode, the teacher employs a sequence of increasingly specific prompts to ensure the child's use of the targeted language form. The specific sequence includes the following steps:

1. Focus on the student who has indicated an interest in some aspect of the environment.

2. Verify the identity of the object, action or event that is of interest to the child.

3. Request elaboration from the student with respect to the object of interest. The type of elaboration will depend upon the specific language form targeted for that particular student.

4. Model the targeted language form for the student.

5. Confirm that the child has imitated (or attempted to imitate) the targeted language form.

6. Provide reinforcement in the form of positive adult attention and access to the desired object, action or event (Mudd & Wolery, 1987).

Examples

Here is an example of how an incidental teaching episode might work for the child whose language target is to increase his use of personal pronouns. During a semi-structured free-play period prior to the beginning of the school day, the child approaches a shelf on which there are several cars, trucks, planes and trains. The child points to the train, looks toward the teacher standing a few feet away, and says, "train." The teacher directs her attention entirely towards the child and says, "What do you want?" The child responds "want train." The teacher then models, "Say, I want the train." The child responds, "I want train." The teacher immediately hands him the train and says, "Good job, here is the train."

Here is an example of how an incidental teaching episode might work for the non-verbal child whose language target is to use the sign for "drink" when requesting juice or water. During snacktime, the teacher is moving around the table providing juice and crackers in response to student requests. When she gets to the non-verbal child, he points to the pitcher of juice while looking at the teacher. The teacher directs her attention towards the student and asks, "What do you want?" The child responds by pointing to the pitcher of juice. The teacher then models the sign for drink, saying "Show me that you want a drink." The student imitates the teacher's sign for drink. The teacher immediately hands him a cup of juice and says, "Good work, here is some juice for you."

APPENDIX E

REVISED DEVELOPMENTAL GUIDE
ORGANIZED BY CHRONOLOGICAL AGE

RATIONALES FOR THE VARIOUS SKILL AREAS

Motor Skills

The development of volitional movement may be viewed as the foundation of development in all other areas. Balance, stability, coordination of both sides of the body, rotational abilities, a broad range of motion, adequate muscle tone and strength, and the volitional control of these movements enable the child to interact actively with his environment. Since the child learns primarily by acting on his environment, motor problems limiting the ability to move and to manipulate objects may slow cognitive development by reducing learning opportunities. It is also likely that the motorically involved child will have difficulty demonstrating the cognitive skills of which he is capable.

In a similar fashion, motor problems involving control of the head, trunk or oral musculature can inhibit the development of oral speech. Limited interaction with the environment may also result in the formation of fewer concepts, thus slowing both comprehension and expressive language development, particularly with respect to spatial concepts and actions. Motoric problems may also isolate children from social interactions with peers and adults, thus restricting opportunities to practice and expand their emerging communicative skills.

Self-help and social-emotional skills areas are also affected by delays or disorders in motor development. Inadequate head or trunk control, stability and equilibrium problems may hinder the development of feeding, dressing and toileting skills. The physically handicapped child may also have difficulty encouraging reciprocal positive interaction with the primary caretaker, thus putting himself at greater risk for attachment failure (Foley, 1980). In addition, the student's self-concept and social interaction skills may suffer as he/she becomes increasingly aware of his/her physical limitations.

Self-Help Skills

Like motor skill development, the development of adequate self-help skills (within the context of existing physical limitations) enables the student to develop a sense of independence and mastery of his body. Competence in self-help areas strengthens self-concept and provides a

foundation for future learning by showing the child that he is capable and in control of his body and environment, thus freeing the teacher to focus on other skill areas.

Cognition/Language Skills

Although experts disagree on the nature of the relationship between language and cognition, the interdependence of the two areas is undeniable. Language is the primary means by which one demonstrates understanding of concepts, processes and events; consequently, when a child's communication skills are inadequate, progress in motor, cognitive, self-help and social-emotional areas are also impacted. In a similar fashion, delays in the acquisition of cognitive skills affect the rate, quality and quantity of language acquisition. A student with cognitive delays may have difficulty understanding higher level symbol representation and abstract concepts, and may be slow to acquire the morphologic and syntactic rules of language. Consequently, the importance of functional cognitive/language skills in the daily life of the handicapped preschooler cannot be underestimated.

Communication facilitates interaction with peers, teachers and family members, and may be a primary means of interaction with the environment for motorically involved students. Piaget's observations of young children indicate that learning occurs primarily when the young child is acting upon his environment (Fischer & Lazerson, 1984). It is therefore critically important that an early intervention program for handicapped students emphasize the development of cognition and language skills, not as isolated skill areas, but as a uniquely inter-related unit.

Social/Emotional Skills

The development of social relationships is an important component of a preschool program, closely related to the development of cognitive, motor, communication and self-help skills. Historically, social/emotional theorists have concerned themselves primarily with the elimination of maladaptive behaviors, as opposed to nurturing the development of pro-social sequences. However, it is becoming increasingly evident that delays or deviations in emotional development may have compounding effects on the acquisition of skill in other areas. The child who is passive or withdrawn

may have fewer opportunities to learn by interacting with his environment, thus impacting his acquisition of language and cognitive skills. The student who behaves impulsively and has a short attention span may have difficulty planning sequences of movement and may rely on ineffectual problem solving approaches that can slow academic progress. His inability to see another's point of view may be reflected in an inflexible approach to attaining desired goals. Emotional problems or delays may also be evidenced by overdependence on adults, resulting in diminished self-confidence, risk-taking or exploratory behaviors.

The significance of attachment, separation and individuation skills is becoming increasingly apparent to professionals working with young handicapped children (Foley, 1980). In addition, the relationship of play behaviors to the development of social and emotional, cognitive, communication and motor skills is recognized as particularly important for handicapped children (Garvey, 1977). The social/emotional objectives in this guide focus on developmental precursors to healthy emotional development and appropriate social interactions. The goal of the teacher is not necessarily to "train" or "teach" these skills, but rather to raise the level of awareness of both family and school members about the social impact caused by the lack of these behaviors, and to provide opportunities for pleasurable interaction that will facilitate their development

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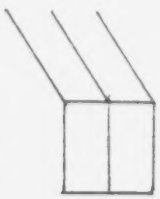
The following objectives are organized by skill area and approximate age of acquisition. The skill areas are subdivided where appropriate to assist the teacher in assessing the student's level of development and in selecting age-appropriate goals for use in the classroom.

0 to 1 YEAR OF AGE

Motor Skills

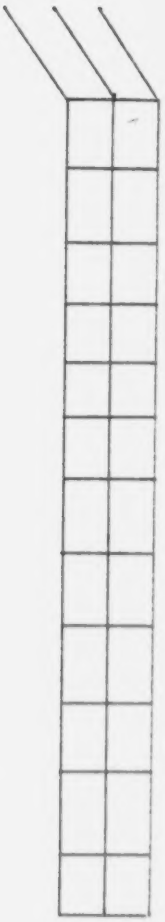
Gross Motor Skills



THE STUDENT EXHIBITS THE FOLLOWING

LOCOMOTOR SKILLS:

1-rolling from prone to supine position (4 mos.)



2-rolling from supine to prone position (4 mos.)

3-rolling continuously (5 mos.)

4-crawling backwards (6 mos.)

5-assumes the creeping position (7 mos.)

6-crawling forwards (8 mos.)

7-creeps forward (8 mos.)

8-pulls body to a standing position (9 mos.)

9-cruises around furniture (10 mos.)

10-walks holding a supporting hand (11 mos.)

11-walks with hands extended (12 mos.)

12-runs stiffly with occasional falls (12 mos.)

13-creeps upstairs (12 mos.)

THE STUDENT EXHIBITS THE FOLLOWING POSTURE/ BODY MECHANICS SKILLS:

14-exhibits head control while in prone position (1 mo.)

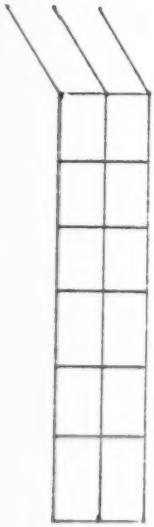
15-bears weight while in prone position (3 mos.)

16-exhibits head control while sitting (3 mos.)

17-sits with support (4 mos.)

18-exhibits head control while in supine position (4 mos.)

19-brings arms to midline while in supine position (5 mos.)



20-lifts legs off ground while in supine position (6 mos.)

21-sits without support (7 mos.)

22-stands with support (7 mos.)

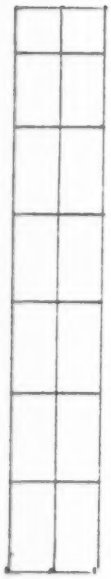
23-independently assumes sitting position (8 mos.)

24-stands without support (10 mos.)

25-independently assumes standing position (10 mos.)

Fine Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING EYE-HAND COORDINATION SKILLS:



26-visually tracks own hand (2 mos.)

27-shakes or examines object placed in hand (3 mos.)

28-looks/reaches for an object with one hand (3 mos.)

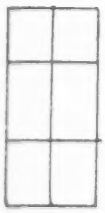
29-looks/reaches for an object with two hands (4 mos.)

30-grasps an object within reach with two hands (4 mos.)

31-grasps an object within reach with one hand (5 mos.)

32-reaches for an object while holding another (5 mos.)

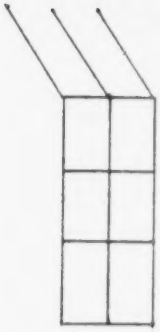
THE STUDENT EXHIBITS THE FOLLOWING GRASP/PREHENSION SKILLS:



33-grasps an object placed in hand (1 mo.)

34-releases an object placed in hand (3 mos.)

35-demonstrates palmar grasp (3 mos.)



36-demonstrates radial palmar grasp (5 mos.)

37-pokes/examines objects (6 mos.)

38-demonstrates neat pincer grasp (10 mos.)

Self-Help Skills

Feeding Skills

THE STUDENT EXHIBITS THE FOLLOWING FEEDING SKILLS:

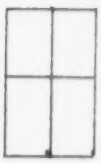
39-coordinates sucking, swallowing and breathing while eating (1 mo.)

40-chews using a munching pattern (5 mos.)

41-takes bites from a cracker (7 mos.)

42-feeds self with fingers (11 mos.)

THE STUDENT EXHIBITS THE FOLLOWING DRINKING SKILLS:



43-drinks from cup held by adult (10 mos.)

44-drinks from cup held in both hands (12 mos.)

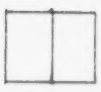
Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING UNDRESSING SKILLS:

45-cooperates passively (10 mos.)

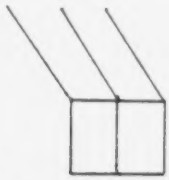
46-helps with undressing (12 mos.)

THE STUDENT EXHIBITS THE FOLLOWING DRESSING SKILLS:



47-cooperates passively (12 mos.)

Toileting Skills



THE STUDENT EXHIBITS THE FOLLOWING TOILETING SKILLS:

48-indicates wet or soiled pants (12 mos.)

Handwashing Skills

THE STUDENT EXHIBITS THE FOLLOWING HANDWASHING SKILLS:

49-cooperates in handwashing (12 mos.)

Language/Cognitive Skills

Non-Verbal Skills

THE STUDENT EXHIBITS THE FOLLOWING NON-VERBAL SKILLS:

50-responds to environmental sounds (1 mo.)

51-responds to human voice (2 mos.)

52-localizes to sound (3 mos.)

53-visually focuses on object/person (4 mos.)

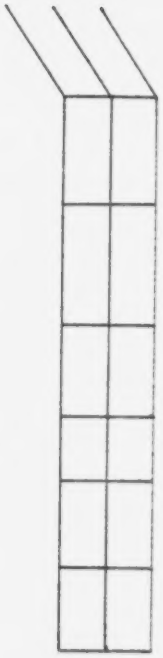
54-visually tracks object/person (4 mos.)

55-establishes, returns and maintains eye contact (4 mos.)

56-responds to speech by looking directly into speaker's face (4 mos.)

57-demonstrates awareness of object permanence (5 mos.)

58-demonstrates means/end causality by using tools to acquire objects (5 mos.)



59-demonstrates means/end causality by using behavior to manipulate others (5 mos.)

60-demonstrates means/end causality by manipulating an object/toy to achieve a desired response (6 mos.)

61-motorically imitates peers/adults (8 mos.)

62-greets non-verbally (11 mos.)

63-responds to verbal commands with gestures (11 mos.)

64-inhibits action in response to "no" (11 mos.)

Receptive Language Skills

THE STUDENT EXHIBITS THE FOLLOWING RECEPTIVE SKILLS:

65-looks at familiar people when named (11 mos.)

66-points to common objects when named (12 mos.)

Expressive Language Skills

THE STUDENT EXHIBITS THE FOLLOWING EXPRESSIVE SKILLS:

67-imitates speech sounds (7 mos.)

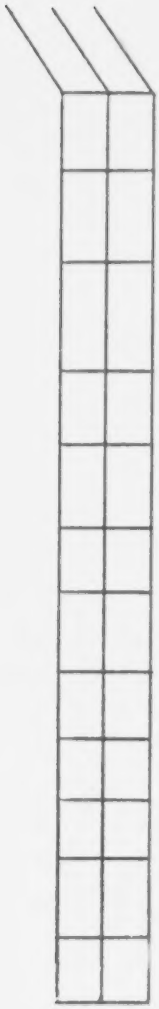
68-imitates non-speech sounds (9 mos.)

Social/Emotional Skills

THE STUDENT EXHIBITS THE FOLLOWING SOCIAL/EMOTIONAL SKILLS:

69-is aware of people (1 mo.)

70-responds to human faces (2 mos.)



71-shows a desire for personal attention (3 mos.)

72-prefers human faces over other visual stimuli (4 mos.)

73-participates in "adult-child dialogue" via mutual gaze, joint action and babbling (4 mos.)

74-shows pleasure in frolic play (5 mos.)

75-discriminates familiar from unfamiliar persons (5 mos.)

76-waves "bye-bye" (9 mos.)

77-offers object to adult without releasing (9 mos.)

78-responds to name (10 mos.)

79-responds to "no-no" (11 mos.)

80-identifies self in mirror (11 mos.)

81-offers and releases toy to adult (12 mos.)

82-expresses emotions (12 mos.)

1 to 2 YEARS OF AGE

Motor Skills

Gross Motor Skills

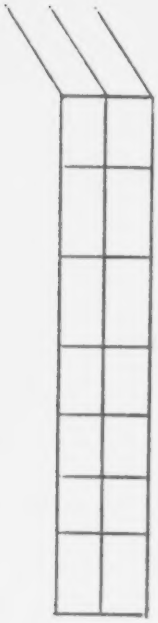
THE STUDENT EXHIBITS THE FOLLOWING

LOCOMOTOR SKILLS:

83-walks with arms swinging (14 mos.)

84-creeps backwards down stairs (14 mos.)

85-bumps forward on bottom downstairs (18 mos.)



86-walks up/down stairs with hand held, two feet per stair (21 mos.)

87-walks up/down stairs using railing, two feet per step (22 mos.)

88-walks and steps over an obstacle (22 mos.)

89-walks quickly (22 mos.)

90-walks backwards (24 mos.)

91-runs quickly without falling (24 mos.)

92-jumps one time off floor with both feet (24 mos.)

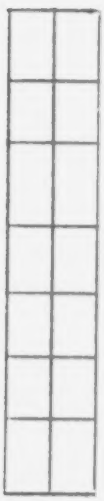
THE STUDENT EXHIBITS THE FOLLOWING POSTURE/ BODY MECHANICS SKILLS:

93-stoops then resumes standing position (18 mos.)

94-stands on one foot with support (18 mos.)

Fine Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING MANIPULATIVE SKILLS:



95-grasps crayon in fist and scribbles (14 mos.)

96-does purposeful scribbling (18 mos.)

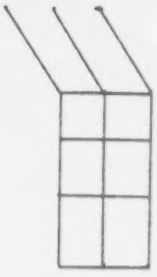
97-paints using whole arm strokes (18 mos.)

98-paints using wrist strokes (24 mos.)

99-builds a tower of five blocks (24 mos.)

100-solves simple inset puzzles (24 mos.)

101-scribbles with crayons but stays on paper (24 mos.)



102-nests objects (24 mos.)

103-manipulates clay (24 mos.)

104-holds scissors correctly (24 mos.)

Self-Help Skills

Feeding Skills

THE STUDENT EXHIBITS THE FOLLOWING FEEDING SKILLS:

105-feeds self with spoon (14 mos.)

106-scoops food with spoon (22 mos.)

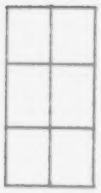
THE STUDENT EXHIBITS THE FOLLOWING DRINKING SKILLS:

107-sucks from a straw (23 mos.)

108-drinks from cup held in one hand (24 mos.)

Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING UNDRESSING SKILLS:



109-removes shoes independently (18 mos.)

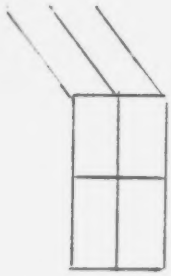
110-removes socks independently (20 mos.)

111-removes coat independently (24 mos.)

THE STUDENT EXHIBITS THE FOLLOWING DRESSING SKILLS:

112-assists with dressing (24 mos.)

Toileting Skills



THE STUDENT EXHIBITS THE FOLLOWING

TOILETING SKILLS:

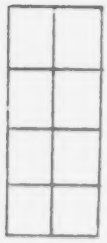
113-sits on toilet without resistance (18 mos.)

114-urinates in toilet with assistance (24 mos.)

Handwashing Skills

THE STUDENT EXHIBITS THE FOLLOWING

HANDWASHING SKILLS:



115-washes hands with assistance (18 mos.)

116-dries hands with assistance (18 mos.)

117-washes hands independently (24 mos.)

118-dries hands independently (24 mos.)

Cognition/Language Skills

Non-Verbal Skills

THE STUDENT EXHIBITS THE FOLLOWING NON-VERBAL SKILLS:

119-indicates choice when presented with options (14 mos.)

120-communicates basic needs/wants non-verbally (15 mos.)

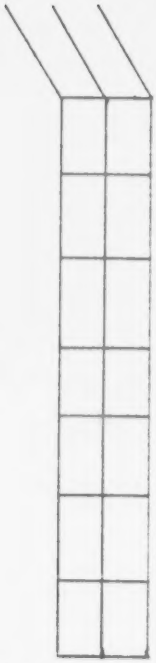
121-establishes and maintains physical proximity (18 mos.)

Receptive Language Skills

THE STUDENT EXHIBITS THE FOLLOWING

RECEPTIVE SKILLS:

122-understands the concepts of "hot" and "cold" (15 mos.)



123-understands simple questions ("Do you want a bottle?") (17 mos.)

124-points to eyes, ears, nose and mouth when named (18 mos.)

125-responds to simple directional commands ("Come here") (18 mos.)

126-matches objects to pictures (19 mos.)

127-points to pictures of common objects when named (20 mos.)

128-responds to location commands involving objects ("Take it outside") (23 mos.)

129-matches identical colors (24 mos.)

Expressive Skills

THE STUDENT EXHIBITS THE FOLLOWING EXPRESSIVE SKILLS:

130-imitates words (13 mos.)

131-labels common objects (15 mos.)

132-expresses basic wants/needs with one word (18 mos.)

133-labels body parts ("nose," "eyes," "ears") (19 mos.)

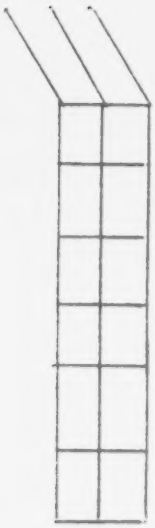
134-expresses non-existence ("all gone") (20 mos.)

135-expresses affirmation/rejection (22 mos.)

136-indicates desire for recurrence of object/action ("more," "again") (23 mos.)

137-uses first name to refer to self (24 mos.)

Social-Emotional Skills



THE STUDENT EXHIBITS THE FOLLOWING

SOCIAL/EMOTIONAL SKILLS:

138-demonstrates affection (14 mos.)

139-is jealous of attention given to others (20 mos.)

140-explores new places (22 mos.)

141-puts toys away upon request (23 mos.)

142-engages in simple make-believe (24 mos.)

143-shows pride in achievements (24 mos.)

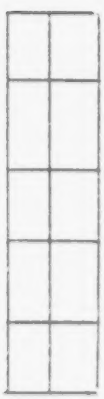
2 to 3 YEARS OF AGE

Motor Skills

Gross Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING

LOCOMOTOR SKILLS:



144-walks up/down stairs with hand held, alternating feet (30 mos.)

145-jumps repeatedly using both feet (30 mos.)

146-walks with heel-toe gait (36 mos.)

147-runs smoothly with changes in speed/ direction (36 mos.)

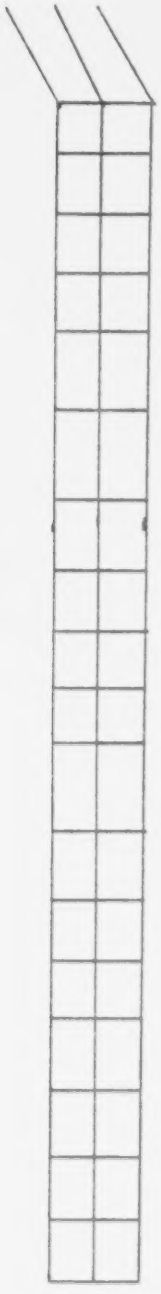
148-hops on preferred foot (36 mos.)

THE STUDENT EXHIBITS THE FOLLOWING POSTURE/

BODY MECHANICS SKILLS:

149-stands on one foot without support (36 mos.)

Fine Motor Skills



THE STUDENT EXHIBITS THE FOLLOWING MANIPULATIVE SKILLS:

150-operates toy knobs (26 mos.)

151-pounds clay (27 mos.)

152-opens and closes scissors (27 mos.)

153-operates door knobs (28 mos.)

154-emphasizes process over product when painting (28 mos.)

155-holds crayon with fingers (not fisted) (30 mos.)

156-unscrews lid on jar (30 mos.)

157-squeezes clay (30 mos.)

158-makes small cuts in paper (30 mos.)

159-screws lid on to jar (32 mos.)

160-paints vertical, horizontal and circular lines (32 mos.)

161-pulls clay apart (33 mos.)

162-holds paper while cutting (33 mos.)

163-solves non-inset puzzles (36 mos.)

164-imitates circular, vertical and horizontal lines (36 mos.)

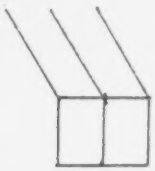
165-rolls clay (36 mos.)

166-names painted pictures (36 mos.)

167-cuts in a straight line (36 mos.)

Self-Help Skills

Feeding Skills



THE STUDENT EXHIBITS THE FOLLOWING FEEDING SKILLS:

168-chews using a rotary action (30 mos.)

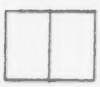
THE STUDENT EXHIBITS THE FOLLOWING DRINKING SKILLS:

169-returns cup to table without spilling (36 mos.)

Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING UNDRESSING SKILLS:

170-removes "pull-down" garments for toileting purposes (30 mos.)



THE STUDENT EXHIBITS THE FOLLOWING DRESSING SKILLS:

171-puts shoes on independently (36 mos.)

Toileting Skills

THE STUDENT EXHIBITS THE FOLLOWING TOILETING SKILLS:

172-defecates in toilet with assistance (28 mos.)

173-communicates need to toilet (30 mos.)

Cognition/Language Skills

Non-Verbal Skills

THE STUDENT EXHIBITS THE FOLLOWING

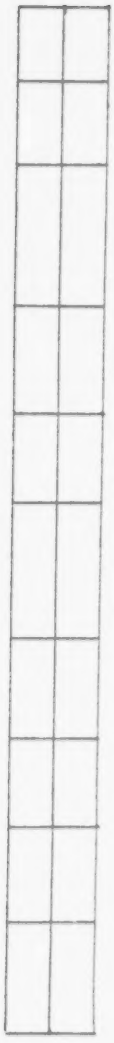
NON-VERBAL SKILLS:

174-establishes/maintains turn-taking activities (36 mos.)

Receptive Language

THE STUDENT EXHIBITS THE FOLLOWING

RECEPTIVE SKILLS:



175-comprehends three word phrases (agent-action-object) (25 mos.)

176-comprehends concept of "more" (26 mos.)

177-identifies objects/pictures by function ("What do you ride in?" or "What do you sleep on?") (28 mos.)

178-points to pictures of 2 word phrases (agent-action) (30 mos.)

179-comprehends concepts of "one" and "just one" (30 mos.)

180-responds to prepositional location commands involving objects ("on," "under," "in," "behind," "in front") (31 mos.)

181-comprehends possessive pronouns ("my," "your") (33 mos.)

182-understands "big," "little," "short," "long" (34 mos.)

183-points to color when named (red, blue, yellow) (36 mos.)

184-identifies pictures of related actions ("kicking," "running," "walking," "jumping") (36 mos.)

Expressive Skills

THE STUDENT EXHIBITS THE FOLLOWING

EXPRESSIVE SKILLS:

185-labels objects/clothing/people in pictures (25 mos.)

186-expresses action/object using two words ("throw ball") (25 mos.)

187-labels actions in pictures (26 mos.)

188-expresses adjective/object ("pretty mommy") (26 mos.)

189-asks simple questions ("Where daddy?") (26 mos.)

190-expresses locations/prepositions involving objects ("in," "on") (27 mos.)

191-describes objects according to function (27 mos.)

192-answers questions using two or more words (29 mos.)

193-names color adjectives (red, blue, yellow) (30 mos.)

194-responds to "WHERE" and "WHAT" questions (32 mos.)

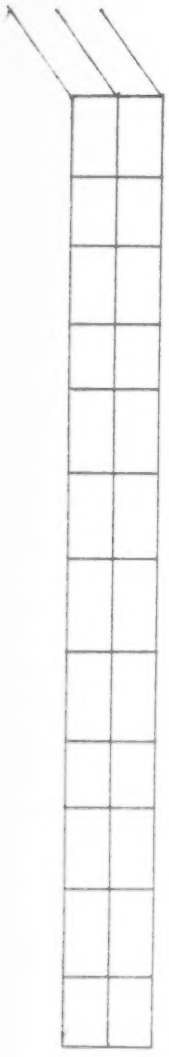
195-labels actions ("go," "sleep") (34 mos.)

196-uses plural forms with occasional errors (35 mos.)

197-speaks in simple sentences (36 mos.)

198-expresses information about self (36 mos.)

Social/Emotional Skills



THE STUDENT EXHIBITS THE FOLLOWING SOCIAL/EMOTIONAL SKILLS:

199-chooses and plays with toys independently (25 mos.)

200-participates in parallel play (25 mos.)

201-responds appropriately to questions involving choices (26 mos.)

202-enjoys helping (26 mos.)

203-imitates activities of daily living (27 mos.)

204-participates in simple group games/ activities (27 mos.)

205-greets familiar adults spontaneously (28 mos.)

206-plays and handles toys non-destructively (30 mos.)

207-avoids simple hazards (33 mos.)

208-demonstrates some turn-taking behavior (34 mos.)

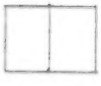
209-demonstrates awareness of consequences (35 mos.)

210-shares property with others (36 mos.)

3 to 4 YEARS OF AGE

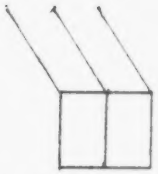
Motor Skills

Gross Motor Skills



THE STUDENT EXHIBITS THE FOLLOWING LOCOMOTOR SKILLS:

211-hops on least preferred foot (38 mos.)



212-walks up/down stairs using railing, alternating feet (44 mos.)

Fine Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING

MANIPULATIVE SKILLS:

213-cuts in a curved line (42 mos.)

214-makes balls with clay (44 mos.)

215-makes crude, unrecognizable objects with clay (48 mos.)

216-copies vertical, circular and horizontal lines (48 mos.)

217-paints recognizable object (48 mos.)

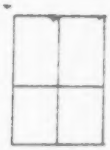
218-cuts a triangle (48 mos.)

Self-Help Skills

Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING

DRESSING SKILLS:



219-puts coat on independently (39 mos.)

220-puts socks on independently (48 mos.)

Toileting Skills

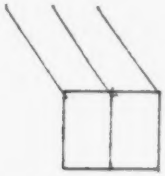
THE STUDENT EXHIBITS THE FOLLOWING

TOILETING SKILLS:

221-toilets independently except for wiping (42 mos.)

Cognition/Language Skills

Non-Verbal Skills



THE STUDENT EXHIBITS THE FOLLOWING

NON-VERBAL SKILLS:

222-exhibits appropriate and symbolic play (48 mos.)

Receptive Language

THE STUDENT EXHIBITS THE FOLLOWING

RECEPTIVE SKILLS:

223-understands concepts of "soft," "hard," "rough," "smooth" (40 mos.)

224-likes to follow along in a book being read aloud (41 mos.)

225-matches identical shapes (circle, square, triangle, rectangle) (42 mos.)

226-responds to commands involving two unrelated actions ("Put your shoe in the closet and bring the book to Mommy") (42 mos.)

227-comprehends personal pronouns (he, they, her, me) (46 mos.)

228-sorts objects into two/three categories (animals, food, furniture) (48 mos.)

229-points to color when named (orange, green, purple), (48 mos.)

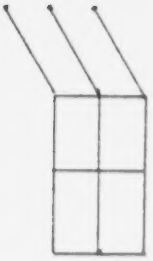
Expressive Skills

THE STUDENT EXHIBITS THE FOLLOWING

EXPRESSIVE SKILLS:

230-names size adjectives ("big," "little") (37 mos.)

231-responds to "WHO" and "WHY" questions (39 mos.)

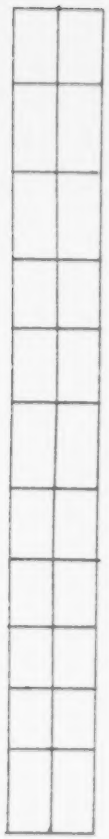


232-recites simple nursery rhymes (43 mos.)

233-recalls information from stories (48 mos.)

Social/Emotional Skills

THE STUDENT EXHIBITS THE FOLLOWING SOCIAL/EMOTIONAL SKILLS:



234-calls attention to own performance (38 mos.)

235-expresses enthusiasm for work or play (39 mos.)

236-enjoys floor play with building or wheeled toys (41 mos.)

237-knows first and last names (42 mos.)

238-attends to task in a group for up to 20 minutes (44 mos.)

239-shows interest in the conversation of others (45 mos.)

240-separates from mother easily (36 mos.)

241-plays cooperatively (46 mos.)

242-shows sympathy towards others (47 mos.)

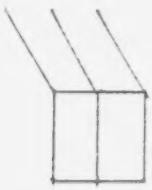
243-has special friends (48 mos.)

244-recognizes facial expressions of primary emotions (48 mos.)

4 to 5 YEARS OF AGE

Motor Skills

Gross Motor Skills



THE STUDENT EXHIBITS THE FOLLOWING

LOCOMOTOR SKILLS:

245-walks up/down stairs without assistance (60 mos.)

Fine Motor Skills

THE STUDENT EXHIBITS THE FOLLOWING

MANIPULATIVE SKILLS:

246-emphasizes end product over process when painting (54 mos.)

247-cuts while moving paper (54 mos.)

Self-Help Skills

Dressing Skills

THE STUDENT EXHIBITS THE FOLLOWING

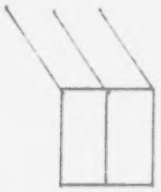
DRESSING SKILLS:

248-puts on "pull-on" garment (50 mos.)

249-knows which shoe goes on which foot (54 mos.)

250-manages fasteners including zippers, buttons, laces, buckles or snaps (60 mos.)

Toileting Skills



THE STUDENT EXHIBITS THE FOLLOWING

TOILETING SKILLS:

251-toilets independently including wiping and handwashing (60 mos.)

Cognition/Language Skills

Receptive Language

THE STUDENT EXHIBITS THE FOLLOWING

RECEPTIVE SKILLS:

252-demonstrates understanding of IS and IS NOT (52 mos.)

253-identifies SAME and DIFFERENT with objects (53 mos.)

254-understands the concepts of "heavy," "light," "loud," "soft," "like," "unlike" (54 mos.)

255-points to circle, square, triangle and rectangle when named (57 mos.)

256-sorts pictures into two/three categories (60 mos.)

257-identifies present, past and future tense actions in pictures (60 mos.)

258-identifies comparative adjectives ("bigger," "biggest," "longer," "longest") (60 mos.)

Expressive Language

THE STUDENT EXHIBITS THE FOLLOWING

EXPRESSIVE SKILLS:

259-counts out a specific quantity (1-5) (49 mos.)

260-describes how simple objects are used (50 mos.)

261-tells the function of an object (52 mos.)

262-expresses greetings/polite social forms (54 mos.)

263-takes part in reading aloud by filling in words and phrases (55 mos.)

264-tells what one does when hungry, thirsty or tired (57 mos.)

265-requests help or clarification (58 mos.)

266-names simple opposites (59 mos.)

267-names shapes (circle, square, triangle) (60 mos.)

268-categorizes verbally by form, color and use (60 mos.)

269-initiates conversation/maintains a topic (60 mos.)

Social/Emotional Skills

THE STUDENT EXHIBITS THE FOLLOWING SOCIAL/EMOTIONAL SKILLS:

270-asserts self in socially acceptable ways (50 mos.)

271-engages in adult role play and imitation (50 mos.)

272-complies with adult directives (52 mos.)

273-recognizes another's need for help and offers assistance (53 mos.)

274-uses social terminology appropriately (54 mos.)

275-respects property and rights of others (60 mos.)

276-asks permission to use another's possessions (60 mos.)

APPENDIX F

STUDENT DATA SHEETS

Student #: 1 Sex: M Category: MH Birthday: 3/25/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-5

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	12 mos.	12 mos.	0 mos.
Posture/Body Mechanics	7 mos.	7 mos.	0 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	33 mos.	33 mos.	0 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	18 mos.	18 mos.	0 mos.
Toileting	22 mos.	22 mos.	0 mos.
Handwashing	*	*	*
Language/Cognition			
Non-Verbal	18 mos.	18 mos.	0 mos.
Receptive	11 mos.	26 mos.	15 mos.
Expressive	9 mos.	9 mos.	0 mos.
Social/Emotional	25 mos.	25 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = .00 Total IEI = .18

Self-Help IEI = .00

Language-Cognition IEI = .71

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 2 Sex: M Category: SPH Birthday: 7/2/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-2

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	33 mos.	48 mos.	15 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	50 mos.	54 mos.	4 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	46 mos.	57 mos.	11 mos.
Expressive	26 mos.	60 mos.	34 mos.
Social-Emotional	41 mos.	60 mos.	19 mos.

Intervention Efficiency Indexes

Motor IEI = 2.29

Self-Help IEI = 1.57

Language-Cognition = 3.29

Social-Emotional = 2.71

Total IEI - 2.47

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 3 Sex: M Category: SPH Birthday: 4/8/85

Year in Program: 1st Chronological Age at Pre-Test: 3-5

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	36 mos.	60 mos.	24 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	30 mos.	48 mos.	18 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	50 mos.	26 mos.
Toileting	24 mos.	42 mos.	18 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	14 mos.	48 mos.	34 mos.
Receptive	26 mos.	33 mos.	7 mos.
Expressive	< 6 mos.	15 mos.	9 mos.
Social-Emotional	22 mos.	52 mos.	30 mos.

Intervention Efficiency Indexes

Motor IEI = 2.86 Total IEI = 3.00

Self-Help IEI = 2.43

Language-Cognition IEI = 2.43

Social-Emotional IEI = 4.29

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 4 Sex: M Category: SPH Birthday: 8/14/85

Year in Program: 1st Chronological Age at Pre-Test: 3-4

	PRE: 12/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	*	*	*
Posture/Body Mechanics	*	*	*
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	36 mos.	36 mos.	0 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	50 mos.	50 mos.	0 mos.
Toileting	*	*	*
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	26 mos.	33 mos.	7 mos.
Expressive	23 mos.	23 mos.	0 mos.
Social-Emotional	45 mos.	46 mos.	1 mo.

Intervention Efficiency Indexes

Motor IEI = .00 Total IEI = .31

Self-Help IEI = .00

Language-Cognition IEI = 1.0

Social-Emotional IEI = .25

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 5 Sex: M Category: SPH Birthday: 8/4/84

Year in Program: 1st Chronological Age at Pre-Test: 4-1

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	36 mos.	36 mos.	0 mos.
Posture/Body Mechanics	18 mos.	18 mos.	0 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	30 mos.	33 mos.	3 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	48 mos.	48 mos.	0 mos.
Toileting	42 mos.	42 mos.	0 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	18 mos.	18 mos.	0 mos.
Receptive	26 mos.	33 mos.	7 mos.
Expressive	18 mos.	34 mos.	16 mos.
Social-Emotional	30 mos.	39 mos.	9 mos.

Intervention Efficiency Indexes

Motor IEI = .14

Self-Help IEI = .00

Language-Cognition IEI = 1.14

Social-Emotional IEI = 1.29

Total IEI = .64

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 6 Sex: M Category: SPH Birthday: 11/30/84

Year in Program: 1st Chronological Age at Pre-Test: 3-9

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	*	*	*
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	<14 mos.	33 mos.	19 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	27 mos.	48 mos.	21 mos.
Toileting	42 mos.	42 mos.	0 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	14 mos.	18 mos.	4 mos.
Receptive	<11 mos.	26 mos.	15 mos.
Expressive	< 7 mos.	24 mos.	17 mos.
Social-Emotional	5 mos.	5 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = 2.71 Total IEI = 1.50

Self-Help IEI = 1.57

Language-Cognition IEI = 1.71

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 7 Sex: F Category: SPH Birthday: 7/24/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-1

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	*	*	*
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	54 mos.	54 mos.	0 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	54 mos.	54 mos.	0 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	53 mos.	54 mos.	1 mo.
Expressive	36 mos.	60 mos.	24 mos.
Social-Emotional	52 mos.	60 mos.	8 mos.

Intervention Efficiency Indexes

Motor IEI = 1.14 Total IEI = 1.36

Self-Help IEI = 1.29

Language-Cognition IEI = 1.86

Social-Emotional = 1.14

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 8 Sex: M Category: SPH Birthday: 2/1/85

Year in Program: 1st Chronological Age at Pre-Test: 3-7

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	18 mos.	0 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	18 mos.	33 mos.	15 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	36 mos.	12 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	*	*	*
Receptive	28 mos.	57 mos.	29 mos.
Expressive	< 6 mos.	60 mos.	54 mos.
Social-Emotional	33 mos.	50 mos.	17 mos.

Intervention Efficiency Indexes

Motor IEI = 1.43 Total IEI = 2.89

Self-Help IEI = 1.71

Language-Cognition IEI = 6.0

Social-Emotional IEI = 2.43

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 9 Sex: F Category: SPH Birthday: 1/24/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-7

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	44 mos.	48 mos.	4 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	54 mos.	54 mos.	0 mos.
Toileting	*	*	*
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	60 mos.	60 mos.	0 mos.
Expressive	48 mos.	60 mos.	12 mos.
Social-Emotional	60 mos.	60 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = 1.86 Total IEI = .68

Self-Help IEI = .00

Language-Cognition IEI = .86

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 10 Sex: M Category: SPH Birthday: 12/14/84

Year in Program: 1st Chronological Age at Pre-Test: 3-9

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	30 mos.	54 mos.	24 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	36 mos.	54 mos.	18 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	*	*	*
Receptive	28 mos.	33 mos.	5 mos.
Expressive	23 mos.	60 mos.	37 mos.
Social-Emotional	33 mos.	60 mos.	27 mos.

Intervention Efficiency Indexes

Motor IEI = 2.71 Total IEI = 2.89

Self-Help IEI = 2.00

Language-Cognition IEI = 3.00

Social-Emotional IEI = 3.86

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 11 Sex: M Category: MH Birthday: 10/18/83

Year in Program: 2nd Chronological Age at Pre-Test: 4-11

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	8 mos.	8 mos.	0 mos.
Posture/Body Mechanics	7 mos.	7 mos.	0 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	6 mos.	6 mos.	0 mos.
Manipulative	14 mos.	14 mos.	0 mos.
Self-Help Skills			
Feeding	12 mos.	12 mos.	0 mos.
Dressing	12 mos.	12 mos.	0 mos.
Toileting	<12 mos.	<12 mos.	0 mos.
Handwashing	12 mos.	12 mos.	0 mos.
Language-Cognition			
Non-Verbal	5 mos.	18 mos.	13 mos.
Receptive	11 mos.	11 mos.	0 mos.
Expressive	< 6 mos.	< 6 mos.	0 mos.
Social-Emotional	24 mos.	24 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = .00 Total IEI = .14

Self-Help IEI = .00

Language-Cognition IEI = .57

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 12 Sex: F Category: SPH Birthday: 4/4/84

Year in Program: 1st Chronological Age at Pre-Test: 4-8

	PRE: 12/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	36 mos.	36 mos.	0 mos.
Posture/Body Mechanics	*	*	*
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	36 mos.	48 mos.	12 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	50 mos.	50 mos.	0 mos.
Toileting	*	*	*
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	36 mos.	48 mos.	12 mos.
Receptive	36 mos.	57 mos.	21 mos.
Expressive	30 mos.	48 mos.	18 mos.
Social-Emotional	36 mos.	60 mos.	24 mos.

Intervention Efficiency Indexes

Motor IEI = 1.50 Total IEI = 2.94

Self-Help IEI = .00

Language-Cognition IEI = 4.25

Social-Emotional IEI = 6.0

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 13 Sex: M Category: SPH Birthday: 3/17/85

Year in Program: 1st Chronological Age at Pre-Test: 3-6

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	30 mos.	36 mos.	6 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	50 mos.	26 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	18 mos.	48 mos.	30 mos.
Receptive	28 mos.	33 mos.	5 mos.
Expressive	24 mos.	27 mos.	3 mos.
Social-Emotional	27 mos.	50 mos.	23 mos.

Intervention Efficiency Indexes

Motor IEI = 1.86 Total IEI = 2.36

Self-Help IEI = 2.43

Language-Cognition IEI = 1.86

Social-Emotional IEI = 3.29

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 14 Sex: M Category: SPH Birthday: 6/24/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-2

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	*	*	*
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	*	*	*
Self-Help Skills			
Feeding	*	*	*
Dressing	54 mos.	60 mos.	6 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	*	*	*
Expressive	*	*	*
Social-Emotional	52 mos.	60 mos.	8 mos.

Intervention Efficiency Indexes

Motor IEI = 2.29 Total IEI = 1.71

Self-Help IEI = 1.71

Language-Cognition IEI = *

Social-Emotional IEI = 1.14

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 15 Sex: F Category: TMH Birthday: 12/13/83

Year in Program: 1st Chronological Age at Pre-Test: 4-11

	PRE: 12/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	24 mos.	30 mos.	6 mos.
Posture/Body Mechanics	*	*	*
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	24 mos.	33 mos.	9 mos.
Self-Help Skills			
Feeding	22 mos.	22 mos.	0 mos.
Dressing	18 mos.	27 mos.	9 mos.
Toileting	24 mos.	24 mos.	0 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	18 mos.	18 mos.	0 mos.
Receptive	19 mos.	26 mos.	7 mos.
Expressive	< 6 mos.	13 mos.	7 mos.
Social-Emotional	23 mos.	23 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = 2.0 Total IEI = 1.06

Self-Help IEI = 1.0

Language-Cognition IEI = 1.25

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved at the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 16 Sex: M Category: SPH Birthday: 10/14/84

Year in Program: 1st Chronological Age at Pre-Test: 3-11

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	33 mos.	33 mos.	0 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	50 mos.	26 mos.
Toileting	*	*	*
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	18 mos.	48 mos.	30 mos.
Receptive	28 mos.	53 mos.	25 mos.
Expressive	23 mos.	26 mos.	3 mos.
Social-Emotional	27 mos.	41 mos.	14 mos.

Intervention Efficiency Indexes

Motor IEI = 1.57 Total IEI = 2.14

Self-Help IEI = 2.29

Language-Cognition IEI = 2.71

Social-Emotional IEI = 2.0

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 17 Sex: M Category: SPH Birthday: 4/3/84

Year in Program: 2nd Chronological Age at Pre-Test: 4-5

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	33 mos.	36 mos.	3 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	36 mos.	60 mos.	24 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	*	*	*
Language-Cognition			
Non-Verbal	*	*	*
Receptive	33 mos.	34 mos.	1 mo.
Expressive	22 mos.	25 mos.	3 mos.
Social-Emotional	35 mos.	52 mos.	17 mos.

Intervention Efficiency Indexes

Motor IEI = 1.71 Total IEI = 1.86

Self-Help IEI = 3.00

Language-Cognition IEI = .29

Social-Emotional IEI = 2.43

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 18 Sex: M Category: SPH Birthday: 10/28/83

Year in Program: 2nd Chronological Age at Pre-Test: 4-10

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	18 mos.	0 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	30 mos.	0 mos.	0 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	50 mos.	26 mos.
Toileting	42 mos.	42 mos.	0 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	6 mos.	6 mos.	0. mos.
Receptive	<11 mos.	26 mos.	15 mos.
Expressive	< 7 mos.	18 mos.	11 mos.
Social-Emotional	5 mos.	5 mos.	0 mos.

Intervention Efficiency Indexes

Motor IEI = .71 Total IEI = .89

Self-Help IEI = 1.57

Language-Cognition IEI = 1.29

Social-Emotional IEI = .00

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 19 Sex: M Category: TMH Birthday: 6/24/84

Year in Program: 1st Chronological Age at Pre-Test: 4-2

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	< 4 mos.	< 4 mos.	0 mos.
Posture/Body Mechanics	4 mos.	4 mos.	0 mos.
Fine			
Eye-Hand Coordination	< 2 mos.	< 2 mos.	0 mos.
Grasp/Prehension	1 mo.	3 mos.	2 mos.
Manipulative	<14 mos.	<14 mos.	0 mos.
Self-Help Skills			
Feeding	7 mos.	7 mos.	0 mos.
Dressing	11 mos.	11 mos.	0 mos.
Toileting	<12 mos.	<12 mos.	0 mos.
Handwashing	<12 mos.	12 mos.	1 mo.
Language-Cognition			
Non-Verbal	3 mos.	5 mos.	2 mos.
Receptive	<11 mos.	11 mos.	1 mo.
Expressive	< 7 mos.	< 7 mos.	0 mos.
Social-Emotional	5 mos.	11 mos.	6 mos.

Intervention Efficiency Indexes

Motor IEI = .06 Total IEI = .28

Self-Help IEI = .04

Language-Cognition IEI = .14

Social-Emotional IEI = .86

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

Student #: 20 Sex: M Category: SPH Birthday: 5/1/85

Year in Program: 1st Chronological Age at Pre-Test: 3-4

	PRE: 9/88	POST: 4/89	GAIN
Motor Skills			
Gross			
Locomotor	44 mos.	60 mos.	16 mos.
Posture/Body Mechanics	18 mos.	36 mos.	18 mos.
Fine			
Eye-Hand Coordination	*	*	*
Grasp/Prehension	*	*	*
Manipulative	33 mos.	36 mos.	3 mos.
Self-Help Skills			
Feeding	*	*	*
Dressing	24 mos.	50 mos.	26 mos.
Toileting	42 mos.	60 mos.	18 mos.
Handwashing	18 mos.	24 mos.	6 mos.
Language-Cognition			
Non-Verbal	*	*	*
Receptive	28 mos.	48 mos.	20 mos.
Expressive	23 mos.	60 mos.	37 mos.
Social-Emotional	33 mos.	60 mos.	27 mos.

Intervention Efficiency Indexes

Motor IEI = 1.71 Total IEI = 3.04

Self-Help IEI = 2.43

Language-Cognition IEI = 4.14

Social-Emotional IEI = 3.86

*Represents areas in which all skills were achieved during the pre-test measurement. These areas were not included in the generation of Intervention Efficiency Indexes.

APPENDIX G

MONTHLY NEWSLETTERS

PANDA PAPERS

Welcome to the PANDA program! Our name stands for Preschool for Assessed Needs in Developmental Areas. Our staff is _____ (teacher), _____ (instructional assistant) and _____ (speech pathologist). The phone number to our room is _____. Please use this number first to contact us, and the school's office number second.

Welcome returning students to the AM class: _____, _____, _____ and _____. New AM students include _____, _____ and _____.

Welcome returning students to the PM class: _____, _____, _____ and _____. Also new student _____.

We have a fun way of working on learning our colors by having color days! We work on two colors per month. Please have your child wear something with the designated color in it. Last year we discovered that a red shirt faded into a white design on it and created "pink." "Brown" was tough for some until we discovered that some kids wear brown everyday (hair)! September is blue and yellow month. Wear blue on Tuesday and yellow on Thursday.

Snacks:

We are on a limited budget for food items. We will use these funds for our cooking projects on Thursdays. So, we would appreciate your help in providing snacks and juice. There is a calendar on the door for you to sign up for the day that would be convenient for you.

Food items include, but are not limited to: cheese, crackers (grahams, saltines, oyster, animal, etc.), yogurt, peanut butter, fruit, raisins, etc. We use one box of crackers and one can (16 oz. frozen) of juice per day.

Schedule:

An activity calendar is posted on the door which lists the group activity for the day. Encourage your child to tell you about their day!

Here are some fingerplays that we will be working on!

FIVE LITTLE HOTDOGS

Five little hotdogs frying in the pan;
The grease got so hot, that one went BAM!

Four little hotdogs... Three little hotdogs...
Two little hotdogs... One little hotdog...

No little hotdogs frying in the pan;
The grease got so hot that the pan went BAM!

FIVE LITTLE MONKEYS

Five little monkeys sitting in a tree;
Teasing Mr. Alligator, "Can't catch me!"
Along came Mr. Alligator, quiet as could be...
SNAP!

Four... Three... Two... One...

No little monkeys sitting in a tree;
Teasing Mr. Alligator, "Can't catch me!"
And here comes Mr. Alligator, FAT as he can be!

THE WHEELS ON THE BUS

The wheels on the bus go round and round;
Round and round, round and round.
The wheels on the bus go round and round;
All through the town.

The children on the bus go up and down...
The wipers on the bus go swish, swish, swish...
The doors on the bus go open and shut...
The driver on the bus says move on back...

HAVE FUN!

PANDA PAPERS

"Happy Halloween!"

The colors this month are black and orange. Tuesday is black day and Thursday is orange day. Please have your child wear something with the color of the day in it!

"Kid-Olympics" field trip is tomorrow. Please be at school by 9:00. I will be bringing a big cooler for lunches and drinks.

Please put your child's name on toys that they bring to school. If that is not possible, ask them to show their toy to Liz or myself. That way, if two kids claim the same toy, we will know who the owner is!

I have located where everyone lives on the map behind my desk. If you are interested in carpooling, please let me know.

Our Halloween parties will be held during the last hour of each session on October 31st. Please join us if you can! We will be wearing costumes. I will leave it up to you as to whether you send your child in costume or send it to be put on for the party. Please sign up for refreshments on the door!

MORE FINGER PLAYS

THERE WAS A LITTLE TURTLE

There was a little turtle who lived in a box.
He swam in a puddle and climbed on the rocks.
He snapped at a mosquito; he snapped at a bee.
He snapped at a minnow and he snapped at me!

He caught the mosquito; he caught the bee.
He caught the minnow, but he didn't catch me!

DID YOU EVER SEE A PUMPKIN?

Did you ever see a pumpkin, a pumpkin, a pumpkin
Did you ever see a pumpkin with no face at all?
With no eyes, and no nose, and no mouth, and no teeth
Did you ever see a pumpkin with no face at all?

So I made a Jack-o-Lantern, Jack-o-Lantern, Jack-o-Lantern
So I made a Jack-o-Lantern with a big, funny face.
With big eyes and a big nose, a big mouth and big teeth
So I made a Jack-o-Lantern with a big funny face!

THREE LITTLE WITCHES ("Ten Little Indians")

One little, two little, three little witches;
Fly over haystacks, fly over ditches.
Slide down the moon without any hitches;
Heigh-ho Halloween's here!

Stand on your head with a lop-sided wiggle;
Tickle your black cats till they giggle!
Swish through the air with a higgly piggle...
Heigh-ho Halloween's here!

FIVE LITTLE PUMPKINS

Five little pumpkins sitting on a gate;
The first one said, "My it's getting late!"
The second one said, "Who's there, who's there?"
The third one said, "There are witches in the air!"
The fourth one said, "Let's run, let's run..."
The fifth one said, "It's only Halloween fun!"
Then "PUFF" went the wind and out went the lights;
Away went the pumpkins on Halloween night!

PANDA PAPERS

"Happy Thanksgiving"

This month's colors are purple and brown. Tuesday is purple day, and Thursday is brown day. Please have your child wear something with the color of the day in it!

There is no school on Friday, November 11th, which is Veteran's Day. Thanksgiving vacation is November 24th and 25th.

_____ school is having a conference day next Wednesday, and an early release day on Thursday. I will let you know what our schedule is going to be.

Thank-you for all the help with our great Halloween parties! Stop by and see the pictures on the board!

This month we will be learning all about food and Thanksgiving.

Periodically, I will publish a list called the "Wish List." These are items that we could use in the classroom or for class projects. If you have any of these items and would like to donate them, we would greatly appreciate it!

WISH LIST

magnet sets: sets of magnets that are the same (i.e., bears, fruit, etc.)

non-aluminum cookie sheets

large snap tape

wooden dowels in assorted sizes

golf tees

25 washers: five sets of five each in graduated sizes

Cool Whip containers with lids

Key tags: 1 1/4 in. in diameter (office supply)

1 inch wide elastic ribbon

jingle bells: 4 each of 4 different sizes

polyfoam and cellulose sponges

FINGER PLAYS

THE INDIAN

This is how the Indian brave paddles his canoe;
Splash, splash, splash, splash.
See how he hunts with his bow and arrow, too!
Zip, zip, zip, zip.
Hear how he beats upon his drum;
Boom, boom, boom, boom.
This is how he dances when the day is done;
Woo, woo, woo, woo.

TABLE STRETCHES

Everyday when we eat our dinner;
Our table is very small.
There's room for daddy, and mommy, and baby;
But that is all...
But when Thanksgiving Day comes;
You won't believe your eyes.
That table grows and stretches;
Until it is this size!!

A FUNNY BIRD

The turkey is a funny bird;
His head goes wobble, wobble.
And all he says is just one word;
Gobble, gobble, gobble!

PANDA PAPERS

"Happy Holidays"

The colors this month are red and green. Tuesday is red day and Thursday is green day!

LAST REMINDER: WORKSHOP -- Wednesday, November 30th, 9:00-10:30 am. Childcare will be provided. Kathy and I hope to see lots of you there!

We will be going on a field trip on Friday, December 2nd. There is a $2.00 donation for the bus. Please be at school by 9:00. The bus will pick us up at 9:15. The tour is at 10:00 am and we will be taking pictures with SANTA after the tour. We should be back by 12:00.

We will be learning about vegetables all this week. Discuss the color, texture, smell and size of the vegetables that you use at home. On Monday, December 5th, we will be making Stone Soup. Please send in a vegetable that your child likes for the soup.

Happy Holidays!

_____, _____ and _____

PANDA PAPERS

This month we are talking about and working with all kinds of clothes. You can help by naming the clothes as your child puts them on or takes them off. Let them choose the clothes they want to wear, or help them choose appropriate clothes by giving them a choice of two or three outfits.

WORKSHOP WORKSHOP WORKSHOP WORKSHOP

Dr. _____ will be here to speak on parenting skills and behavior control on Thursday, January 19th at 6:30 pm. Following the lecture, he will be available to answer your particular questions or concerns. We hope that all parents can attend. Unfortunately, we will not be able to provide childcare; however, we will provide refreshments!

BE THERE! BE THERE! BE THERE! BE THERE!

FINGER PLAYS

DRESSING

Children, put your pants on, pants on, pants on...
Children put your pants on, one, two, three!

Children, put your socks on, socks on, socks on...
Children put your socks on, one, two, three!

Children put your shoes on...
Children put your shirt on...
Children put your sweater on...

Children are all dressed now, dressed now, dressed now...
Children are all dressed now, let's go play!

THE SNOWMAN

Roll him and roll him until he is big;
Roll him until he's as fat as a pig!
He has two big black eyes and a hat on his head;
He stands there all night while we go to bed!

WINTERSONG

Come sing a song of winter, of winter, of winter.
Come sing a song of winter, the cold days are here.
With winter winds blowing and rosy cheeks glowing;
Come sing a song of winter, the cold days are here!

MOTHER'S LITTLE HELPER

Sensible Steps...

1. Collect several small, medium and large clothing items to practice folding. Place them in a lightweight plastic laudry basket with handles.

2. Show your child how to carry the basket to a table and fold the clothing items, one at a time. Possible items include socks, handkerchief, hand towel, t-shirt and wash cloth.

3. Your child will also enjoy counting the folds when working with individual items. For example, when folding a sock, count "one" because it only takes one fold to arrange the sock for storage. Count "one, two" when folding a wash cloth, since it takes two folds for this item.

PANDA PAPERS

"Happy Valentine's Day"

February is pink and red month. Tuesday is pink day and Thursday is red day. Let's all wear something with the color of the day!

No school on Monday, February 20th, due to the President's Day holiday.

Our Valentine's parties will be held during the last hour of class on Tuesday, February 14th. Each class will exchange valentines during their party. See me if you would like a list of names.

We will be going to the library for a storytime and picnic on the library grounds. The Chapter 1 kids will be joining us. The AM class will go on Friday, February 24th from 9:30 to 12:00. There will be no PM class that day. The afternoon class will go on Friday, March 3rd from 9:30 to 12:00. There will be no AM class on that day. Your child will need to bring a sack lunch for the field trip. All parents are free to join us! If you have questions or concerns about this schedule, please let me know....

I will be attending three conferences in the next two weeks. On Wednesday the 8th, there will be no home visits. There will also be a substitute teacher on Friday, February 10th, Thursday, February 16th, and Friday, February 17th.

HELP! They took away our credit card! At the present time we have used up our funds for cooking in class. If you would like to help out by donating the needed ingredients one week, let me know and I'll tell you what items we need for that particular week! Thanks for your help!!

_____, _____ and _____

PANDA PAPERS

"Happy St. Paddy's Day!"

Our colors this month are green and brown. Tuesday will be green day and Thursday will be brown day...

This month, we will be taking a field trip to the zoo! The AM class will go on Tuesday, March 14th. There will be no PM class on that day. The afternoon class will go on Thursday, March 16th. There will be no AM class on that day. Your child will need a sack lunch with a drink that is NOT in a can or a bottle. We also need LOTS of parents to come along--see me if you would like to help lead the troops!

Spring break runs from March 20th through March 24th. Classes will resume on Monday, March 27th.

We will be talking about all kinds of transportation vehicles this month. Please have your child bring in any books about transportation that he might like to share. Also, on Monday, March 13th, we will be having a "Vehicle Day." Your child may bring in one vehicle for show and tell. Please talk with your child about his or her vehicle before coming to school (color, size, shape, where it is used, etc.) so that everyone will have something to tell!

The AM class went to the library last Friday and had a wonderful time. We listened to a story about a mouse and about an old lady who swallowed a fly. We also did a fingerplay about monkeys jumping on the bed. The kids have helped to write a book about their trip, and each child will be able to "check-out" the book to take home for an evening. The afternoon class will be going to the library this week, and will create their "book" next week.

FINGERPLAYS

CHOO-CHOO TRAIN

This is a choo-choo train;
Puffing down the track.
Now it's going forward;
Now it's going back!

Now the bell is ringing;
Now the whistle blows.
What a lot of noise it makes;
Everywhere it goes!!

TRAVELING

Airplanes fly, with wings on high;
Ships sail, on a watery trail.
Cars are the way we travel the most;
They line the highways from coast to coast!

TRAINS

This little train goes down the track;
This little train goes up and back...
This little train goes round and round;
This little train makes a very loud sound!

TIPS FOR READING WITH YOUR CHILD

1. Have the child sit next to you in a comfortable place.

2. Read slowly and clearly with lots of expression.

3. Talk about the pictures and the story.

4. Explain new vocabulary.

5. Run your finger along the type from left to right as you read.

6. Ask questions. "What do you think he will do?"

7. Leave out occasional words and let the child fill them in.

8. Let your child retell the story in his own words.

9. Make reading a pleasant experience. Stop when your child is tired.

APPENDIX H

PARENT INSERVICES--CONTENT AND FLYERS

INSERVICE #1: FACILITATING COMMUNICATION

LECTURE NOTES

A - Welcome
- Introduce teachers
- Round Robin parent introductions

B - Overview of Development
- Parent's role
  - as first teachers
    - to provide a model
    - to provide feedback
    - to provide pleasant experiences that their child can talk about
    - to provide concrete experiences to stimulate learning and thinking

- Normal Non-Fluencies
  - Listen to WHAT the child says, not HOW he says it.
  - Don't interrupt or tell him to start over.
  - Encourage and praise your child. Make communication enjoyable.
  - Keep questions at a minimum.
  - Discourage others from making comments about the child's speech.
  - Speak slowly and clearly.

C - Communication in the PANDA Classroom
- Language-based
- Reliance on incidental teaching techniques to facilitate language growth

  - Four levels of language
    - Non-verbal/pre-language: establishing eye contact, strengthening listening skills, developing some type of communicative intent

    - One word stage: the goal is functional communication, labeling objects, actions, colors, etc.

    - Two-Three word stage: the child begins to respond to WH questions, but still has difficulty with longer and more complex questions. The GOAL is to provide many experiences to hear and produce longer sentences.

Modeling/Expansion Techniques - example
Child: "Want truck."
Teacher: "You want the big blue truck?"
Child: "Yes, the big blue truck."

- Four-Six word sentences: the child is able to talk about past and present events, answer HOW and WHY questions and do higher level problem solving

- The relation of Articulation to Language development

D - Suggestions for Parent/Child Language Activities

E - View and Discuss Videotape

F - Question/Answer Period

INSERVICE #2: PARENTING AND BEHAVIOR CONTROL

LECTURE NOTES

A - Speaker introduces self and describes background

B - Children have Three Basic Psychological Needs
- LOVE
- STRUCTURE
- EXCITEMENT

C - LOVE
- When children push for attention inappropriately, ignore their behavior or send them from the room.
- Signals that communicate a need for LOVE
  - inexplicable sadness
  - regressive behaviors
  - desperate attempts to please
- The need for love can be met by:
  - genuine appreciation of children as people
  - affirmation of your faith in their ability
  - encouragement
- Don't solve kids' problems for them--be supportive in insisting that they can do it for themselves

D - STRUCTURE
- Children have a strong need for clear limits
- Parents should set limits by:
  - making their expectations clear
  - loving and consistent discipline
- Keep your anger under control when dealing with a stubborn child
- Be sure that they know that they're being punished because of something they did--NOT because you're angry.
- Punishments should be as immediate as possible, and they should be applied <u>every</u> time.
- Kids should be rewarded whenever they do well, and praise should be given at least twice as often as punishments.

E - EXCITEMENT
- If excitement is lacking in a child's life, he will try to generate it in negative ways.
- Foster excitement by:
  - encouraging contests/competitions that the child can win
  - injecting small doses of enthusiasm into routine activities

- occasionally surprising the child by doing the unexpected -- SPONTANEITY!

PANDA PARENT WORKSHOP

"BUILDING PARENT-CHILD COMMUNICATION SKILLS"

WEDNESDAY, NOVEMBER 30TH

9:00 - 10:00 AM

CHILDCARE WILL BE PROVIDED

PLEASE JOIN US !!

PANDA PARENT WORKSHOP

"PARENTING AND BEHAVIOR CONTROL"

THURSDAY, JANUARY 19th at 6:30 PM

Please be Prompt so Dr. Jeske has time to answer your questions

PLEASE JOIN US !!

APPENDIX I

PARENT INSERVICE SURVEY RESULTS

Question/Response	Inservice #1 (n = 9)	Inservice #2 (n = 6)
Value of Pre-Lecture Socializing		
5	4	2
4	5	2
3	0	1
2	0	1
1	0	0
Value of Speaker's Presentation		
5	8	5
4	1	1
3	0	0
2	0	0
1	0	0
Value of Videotaped Class Session		
5	4	NA
4	4	NA
3	1	NA
2	0	NA
1	0	NA
Value of Question/Answer Period		
5	5	6
4	3	0
3	1	0
2	0	0
1	0	0

(5 = very valuable; 4 = valuable; 3 = no strong feelings for or against; 2 = not very useful; 1 = not at all helpful)

APPENDIX J

SUMMARY -- STUDENT IEIs

Student	Category	MS	SHS	LCS	SES	TOTAL
1	MH	.00	.00	.71	.00	.18
2	SP	2.29	1.57	3.29	2.71	2.47
3	SP	2.86	2.43	2.43	4.29	3.00
4	SP	.00	.00	1.00	.25	.31
5	SP	.14	.00	1.14	1.29	.64
6	SP	2.71	1.57	1.71	.00	1.50
7	SP	1.14	1.29	1.86	1.14	1.36
8	SP	1.43	1.71	6.00	2.43	2.89
9	SP	1.86	.00	.86	.00	.68
10	SP	2.71	2.00	3.00	3.86	2.89
11	MH	.00	.00	.57	.00	.14
12	SP	1.50	.00	4.25	6.00	2.94
13	SP	1.86	2.43	1.86	3.29	2.36
14	SP	2.29	1.71	*	1.14	1.71
15	TMH	2.00	1.00	1.25	.00	1.06
16	SP	1.57	2.29	2.71	2.00	2.14
17	SP	1.71	3.00	.29	2.43	1.86
18	SP	.71	1.57	1.29	.00	.89
19	PH	.06	.04	.14	.86	.28
20	SP	1.71	2.43	4.14	3.86	3.04

* = Had already achieved all tasks during baseline testing

MS = motor skills

SHS = self-help skills

LCS = language/cognition skills

SES = social/emotional skills

PH = physically handicapped

SP = speech handicapped

TMH = trainable mentally handicapped

MH = multiple handicapped